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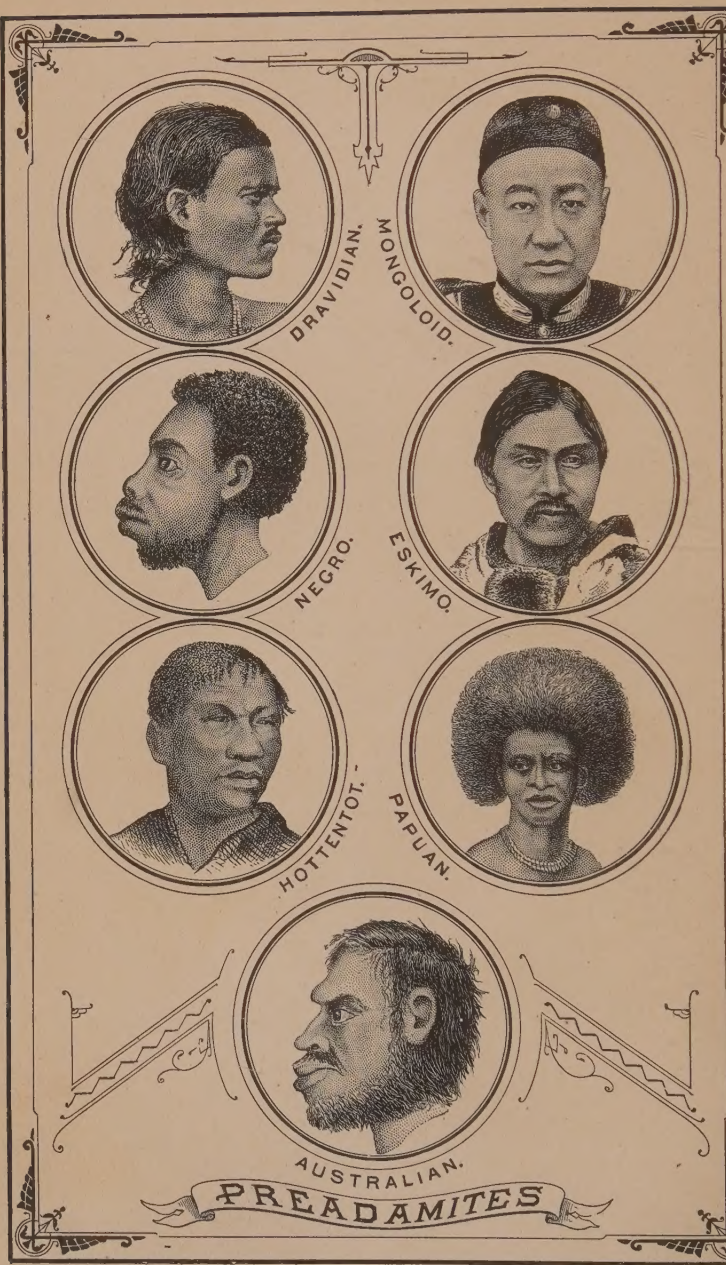
DRAVIDIAN.
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NEGRO.
ESKIMO.
HOTTENTOT.
PAPUAN.
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PREADAMITES

PREADAMITES;

OR A DEMONSTRATION OF

THE EXISTENCE OF MEN BEFORE ADAM;

TOGETHER WITH

A STUDY OF THEIR CONDITION, ANTIQUITY,
RACIAL AFFINITIES,

AND PROGRESSIVE DISPERSION OVER THE EARTH.

WITH CHARTS AND OTHER ILLUSTRATIONS.

By ALEXANDER WINCHELL, LL.D.,

PROFESSOR OF GEOLOGY AND PALÆONTOLOGY IN THE UNIVERSITY OF MICHIGAN;
AUTHOR OF "SKETCHES OF CREATION," "THE DOCTRINE OF EVOLUTION," "THE RECONCILIATION OF SCIENCE AND RELIGION,"
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purely linguistic interpretation of the Bible. We have now the facts of race-histories, and the discovered laws of animal life, past and present, to summon to the sanction and support of the conclusion. I have not contented myself with the employment of the direct argument, but have attempted to show that the old hypothesis of the descent of the Black races from Ham is equally unscriptural and unscientific. Finally, assuming the thesis proved, I have endeavored to gratify the natural and intelligent curiosity which expresses itself in the questions: Who, then, were the first men? Where did they appear, and how long since? How have the races come into existence, and what has been the method of their dispersion over the earth? These questions necessarily lead us to the very borders of the field of recognized facts, and even into the domain of speculation; but I hope I have in most cases presented views which coördinate the facts in a rational conception, if I have not enunciated conclusions which will stand the test of future investigation. I hope, also, that on some of these themes I have presented groupings of the facts and tentative generalizations which will interest the strictly scientific inquirer. In any event, I desire the reader to consider that the defense of the main thesis is not involved in any of the hazard of the speculative suggestions brought forward in the sequel.

It is proper, also, to direct the reader's attention to what I have *not* affirmed, however conjecturally; and I feel the need of this the more because I have

not happened to meet with a single criticism adverse to my conclusion, as heretofore announced, which did not err in its representation of my views. I will not moralize on the circumstance that opinions which we disapprove must be so generally forced into the company of other opinions which are sure to provoke general abhorrence. In the present case, for instance, I have not assumed a position hostile to the Bible; it would have been irrational to do so, since it is the assertion of the Bible which determines what we are to understand by Adam. Had the Bible affirmed explicitly that Adam had no progenitor, I should simply have declared the facts of the genesiacal history inconsistent with the affirmation, as the facts of science would also be. I have even devoted a chapter to the proof that preadamitism is neither inconsistent with the Bible nor with the orthodoxy of approved divines. More particularly, I have not disputed the divine creation of Adam, even in maintaining that he had a human father and mother. I have not impaired the unity of mankind, but have removed the incredibility of that doctrine as grounded in the descent of Negroes and Australians from Noah and Adam. I have not affirmed — even like M'Causland and other ecclesiastical polygenists — that mankind, one in moral nature, are not one in origin; since I hold that the blood of the first human stock flows in the veins of every living human being. I have not excluded the Preadamites and their descendants from the benefits of the "plan of redemption," since I

maintain that all mankind are equally the subjects of redemption. I have not degraded Adam below the level on which the Bible places him, since I do not recognize him as the starting-point of humanity. Finally, I have not pictured man as risen from the organic grade of a brute, since I wished only to show that he was in existence before the "first man" of the Hebrews.

These disavowals are explicit, but I am prepared to hear one critic after another proclaiming that such views are the logical consequences of the positions assumed; that somehow, in his way of thinking, they all go together; that in short, I need some watchful and judicious monitor to inform me what I do believe.

In entering upon this work I entertained the conception of a volume which should be unimpeachably popular, but I soon felt the propriety of accompanying the argument with some array of scientific support and authoritative opinion. To have omitted such sanctions would have opened the door to flippant denials of the truth of my statements, and the necessity would still have arisen to show what ground I have for affirming as I do. The style of the book, nevertheless, remains strictly popular, while the references made will be found of interest to all who desire to consider the question of preadamitism upon its merits.

I am indebted to several persons for the original ethnic portraits with which the pages of the work are enriched. Among them, I take pleasure in mention-

ing Prof. M. W. Harrington, late of the Imperial University at Peking; Prof. J. B. Steere, who has recently returned from a four years' journey around the world; Dr. E. Bessels, of the Polaris Expedition; Rev. S. E. Bishop, of Honolulu; Miss Luella Andrews, late of Honolulu; Mr. D. Sewell, of Sonora, California, and Mr. W. H. Jackson, Photographer of the United States Geological and Geographical Survey of the Territories, under the direction of Dr. F. V. Hayden.

I cannot refrain from adding the acknowledgment of great obligation to the publishers for their generous and enlightened conception of the proper illustration and mechanical execution of the work.

THE AUTHOR.

Ann Arbor, Michigan, April 13, 1880.

ANALYTICAL CONSPECTUS.

CHAP.

I. The Data of the Discussion.

Some Traditional Beliefs derived from the Bible . . I

What the Bible contains touching Primitive Men.

Biblical Language II

Dispersion of the Noachites.

The Hamites and their Dispersion . . . III

The Semites and their Dispersion . . . IV

The Japhetites and their Dispersion . . . V

What Peoples are Biblically Accounted for

Conspectus of the Types of Mankind . . VI

The Biblical Ethnography too limited . . VII

II. The Affirmative Argument.

Time at our disposal for Racial Differentiation.

A Glance at Hebrew Chronology VIII

Elements of Egyptian Chronology IX

Recognized Time since the Flood Insufficient.

Prenoachite Races X

Recognized Time since Adam Insufficient.

Amount of Racial Distinctions XI

Biblical Antiquity of Race Distinctions . . XII

Non-biblical Antiquity of Race Distinctions . XIII

Preadamic Races XIV

III. The Negative Argument.

The Black Races not descended from Ham.

The Hamitic Origin of Negroes considered . . XV

Racial Rank of Negro opposed to Hamitic Origin.

Negro Inferiority XVI

Degeneration of Races Unknown . . . XVII

CHAP.

IV. Pendants to the Discussion.

Theological Consequences of Preadamitism . . . XVIII

Genetic Relations of the Races.

Genealogy of the Black Races XIX

Genealogy of the Brown Races XX

Genealogy of the White Race XXI

Progressive Dispersion of Mankind.

Cradle of Humanity and Dispersion of the Black Races XXII

Dispersion of Asiatic Mongoloids XXIII

Dispersion of American Mongoloids . . . XXIV

Dispersion of Dravidians and Mediterraneans . . XXV

Condition of Primitive Man XXVI

Antiquity of Man XXVII

Epoch of the First Man.

Epoch of the Stone Folk of Europe.

The Patriarchal Periods XXVIII

Preadamitism in Literature XXIX

CONTENTS.

CHAPTER I.

Some Traditional Beliefs.

Some biblically-based beliefs touching primitive humanity — These mostly accessible to scientific evidence, p. 2 — Conceivability of valid metaphysical evidence, p. 3 — Recent origin of sciences bearing on above beliefs, p. 4 — Increasing light afforded by the expanding sciences, p. 4 — Our inquiry is how God acted, not how he was able to act, p. 5.

CHAPTER II.

Biblical Language.

What must be shown if Adam is assumed to be the first human being, p. 7 — Fallibility of the English Bible, p. 8 — Various readings in the Hebrew texts, p. 8 — The Bible, however, substantially uncorrupted, p. 9 — The proper names in the tenth of Genesis not personal, but tribal and geographical, p. 10 — Six reasons for this conclusion, pp. 11–15.

CHAPTER III.

The Hamites and their Dispersion.

The word KhaM, p. 16 — Affiliations of Cush, p. 17 — Affiliations of Mizraim, p. 20 — Affiliations of Phut and Canaan, p. 21 — Historical dispersion of Hamites, p. 23 — The Pelasgians in Greece, p. 24 — The Etruscans in Italy, p. 25 — Hamites in the North of Africa, p. 26 — In the East of Africa, p. 27 — The Guanches, p. 28 — Extension of the meaning of Æthiopia, p. 28.

CHAPTER IV.

The Semites and their Dispersion.

The word SheM, p. 30 — Affiliations of Elam, p. 30 — Affiliations of Asshur, p. 31 — Affiliations of Arphaxad, p. 31 — Affiliations of Lud and Aram — p. 34 — Historical dispersion of Semites, p. 35.

CHAPTER V.

The Japhetites and their Dispersion.

The word IaPheTt, p. 38 — Affiliations of Gomer, p. 38 — Affiliations of Magog, p. 39 — Affiliations of Javan, p. 40 — Affiliations of Tubal, Meshech and Tiras, p. 42 — Historical dispersion of Japhetites, p. 43 — The Asiatic Aryans, p. 43 — The Mediterranean stream of Aryans, p. 44 — The Northern stream of Aryans, p. 45 — The Scythic branch of this stream, p. 47 — Summary of Aryan movements in Europe, p. 48 — Explanation of "Chart of Dispersions," p. 50.

CHAPTER VI.

Principal Types of Mankind.

Tabular Conspectus, p. 52 — The White Race, p. 53 — The Dravidians, p. 54 — The Mongoloids, Malay Family, p. 57 — The Malayo-Chinese, Chinese and Japanese Families, p. 60 — The Altaic Family, p. 62 — The Behring's Family, p. 64 — The American Family, p. 66 — The Negroes, p. 68 — The Fundi and Fulbe, p. 70 — The Hottentots and Bushmen, p. 71 — The Australians, p. 73 — The Papuans, p. 74 — Table of population, p. 76 — Influence of hybridism, p. 77 — Racial blendings often incomplete, p. 80 — The extirpation of races, p. 80 — Miscigenesis as a political expedient in the United States, p. 81 — Hybridism results in deterioration, p. 83 — Testimonies of Von Tschudi, Seemann, Kneeland, Norris, Smith and Knox, p. 83 — Antagonizing tendencies toward unification and differentiation of races, p. 85 — Question of the value of human distinctions, p. 86.

CHAPTER VII.

Limited Scope of Biblical Ethnography.

Résumé of genesiacal dispersion, p. 88 — Its limited extent presents great difficulties to the popular belief, p. 89 — The genesiacal dispersion not intended to cover all peoples then existing, p. 90 — Have we discovered the utmost limits of the genesiacal chart? p. 90 — The primitive Ethiopia did not spread over the interior of Africa, p. 91 — The word is Greek, not Hebrew, p. 91 — The use of the word Cush implies an Asiatic country, p. 91 — Examination of cases supposed to refer to an African Cush, p. 91 — The import of KSh as a name of Egypt, p. 95.

CHAPTER VIII.

A Glance at Hebrew Chronology.

Time required by the theory that Adam was the first man and a

white man, p. 98 — Epoch of Creation according to various authorities, p. 99 — From Adam to the Deluge, p. 101 — From the Deluge to Christ, p. 102 — Ages of the Patriarchs, p. 103 — Uncertainty of Hebrew chronology, p. 104 — Opinions of orthodox authorities, p. 106.

CHAPTER IX.

Elements of Egyptian Chronology.

Egyptian antiquity inconvenient to traditional beliefs, p. 109 — Hence a distinction into long and short chronologers, p. 109 — Sources of Egyptian chronology, p. 110 — Manetho, and the question of consecutiveness in the dynasties, p. 110 — Tablets, papyri, genealogical lists and stelæ, p. 112 — Various determinations of the "Era of Menes," p. 114 — Dynastic parallelisms of various authorities, p. 114 — Table of Egyptian Dynasties Parallelized, p. 116 — Table of dates of the "Era of Menes," p. 117 — Lepsius as a representative of moderate views, p. 117 — Geological age of the Nilotic delta, p. 118 — Its bearing on the first settlement of the delta, p. 119 — Indications of prolonged national existence before Menes, p. 120 — Time required for the development of settled monarchies, p. 121 — Bearing of the "Sothic Period" on Egyptian chronology, p. 123 — Characteristics of the first four dynasties, p. 124 — Of the fifth, sixth and twelfth, p. 126 — Of the dynasties of the Shepherd Kings, p. 126 — Of the dynasties of the New Empire, p. 126 — Egyptian miscigenesis, p. 127 — Table of most ancient epochs, p. 128 — Primitive chronology of the Chinese, p. 129 — Mythological chronologies, p. 129, note.

CHAPTER X.

Prenoachite Races.

Genesis silent in regard to Prenoachites not of the line of Adam, p. 132 — But it contains some significant implications, p. 133 — Events happening before Abraham, p. 133 — What is implied in the existence of great cities soon after the Flood, p. 135 — The descendants of Cain in existence after the Flood, p. 136 — Non-biblical evidence, p. 137 — Traces of Turanian antediluvians, p. 137 — Citations from F. Lenormant, p. 140 — Remnants of Mongoloid aborigines, p. 143 — Indications of Dravidian antediluvians, p. 144 — Prenoachite populations in Egypt and in Europe, p. 145 — Statements from ancient writers, p. 145 — Mongoloid character of prenoachite Europeans, p. 147 — The Basques as a remnant of them, p. 149 — Prehistoric skulls of Europe also Mongoloid, p. 151 — Modern facts confirmatory of this conclusion, p. 153 — The Deluge, consequently, of local extent, p. 154.

CHAPTER XI.

Race Distinctions.

Wide isolation of the Black races from the White, p. 156 — I. Adam a white man, p. 158 — Legends of a black Adam, p. 158 — Race characters of the biblical Adam, p. 159 — Examination of the text, p. 159 — II. Nature and amount of racial distinctions, p. 161 — 1. Anatomical comparisons: Cranial capacities, p. 162 — Cephalic index, p. 165 — Auricular radii, p. 168 — Projections, p. 169 — Prognathism, p. 170 — Sundry anatomical characters, p. 171 — 2. Physiological comparisons: Growth and strength, p. 175 — Indolence of Negro temperament, p. 175 — Inferior sensibility to medicinal agents, p. 177 — Feebleness of the Mulatto, p. 178 — Insusceptibility of the Negro to certain classes of diseases, p. 180 — 3. Psychic comparisons: Mental sluggishness of Negroes, p. 181 — Testimony of a teacher, p. 183 — Correlation of race to environment, p. 184 — This correlation is far from exact, p. 185.

CHAPTER XII.

Biblical Antiquity of Race Distinctions.

Biblical statements supposed to imply Preadamites, p. 188 — Reasons why so supposed, p. 189 — Cain's wife, p. 190 — The city of Enoch, p. 193 — Wives of Irad and Lamech, p. 193 — The "sons of God" were sons of Preadamites, p. 194.

CHAPTER XIII.

Non-biblical Antiquity of Race Distinctions.

Egyptian and Assyro-Chaldæan monuments explicit, p. 197 — The four races known to the Egyptians, p. 198 — Indications from the pharaonic portraits, p. 200 — Representations of foreign personages, p. 201 — Representations of the Mediterranean race, p. 201 — Representations of typical Egyptians, p. 203 — Portraits of Negroes, 205 — Mention of Negroes in the Twelfth Dynasty, p. 207 — Negroes pictured in the Eleventh Dynasty, p. 208 — Negro auxiliaries in the Sixth Dynasty, p. 208 — Summary of the facts, p. 209.

CHAPTER XIV.

Preadamite Races.

Table of first-known advents of human types, p. 211 — Table of intervals from Adam and the Deluge to first-known advents of

human types, p. 212 — Comparison of these dates with the "orthodox" chronology, p. 213 — The early Negro type especially considered, p. 214 — The subject considered from the stand-point of a local Deluge, p. 215 — The persistence of the Negro similar to that of other organic types, p. 216 — All types, however, subject to secular variation, p. 217 — Negro transformations real, but not confined to 2000 years, p. 217 — Intervals to first-known advents of human types on the basis of the Lepsian chronology, p. 218 — Absurd results of comparisons of these dates with the orthodox chronology, p. 219 — The other Black races, preadamic as well as the Negroes, p. 221.

CHAPTER XV.

Hamitic Origin of Negroes Considered.

Ostensible ground for the opinion undiscovered, p. 222 — Supposed grounds: 1. The genealogical lists in Genesis not complete, p. 223 — 2. The curse pronounced by Noah, p. 225 — 3. The significance of the word KhâM, p. 226 — 4. Early racial changes were perhaps more rapid than later ones, p. 227 — Reply to this argument, p. 230 — The palæontological evidences against pristine plasticity of natures, p. 232 — Apparently sudden advents into existence probably illusory, p. 234 — African varieties prove hybridism, not transition from Adam, p. 236 — Linguistic diversification no proof of plasticity of organism, p. 240 — The proof of Preadamitism essentially biblical, p. 242.

CHAPTER XVI.

Negro Inferiority.

The inferiority of the Negro not caused by oppression, p. 244 — Cephalic indications of Negro inferiority: cranial capacity, cephalic index, non-closure of sutures, prognathism, p. 245 — Other points of inferior structure, p. 247 — Cerebral inferiority, p. 249 — Intellectual character of the American Negro, p. 251 — The African Negro in his physical aspect, p. 253 — Deficiency of results during the Negro's race existence, p. 256 — The physical conditions of the continent not bad, p. 258 — Useful plants and animals abundant, p. 259 — These the natives have failed to utilize, except to a limited extent, p. 260 — America and its aborigines in contrast with Africa, p. 262 — Aids offered by contact with Asiatic civilization, p. 263 — The civilizable Maories contrasted with the Negroes, p. 264 — Summation of the evidences, p. 265 — The conclusion entirely free from prejudice, p. 266 — Similar inferiority of the other Black races, p. 266.

CHAPTER XVII.

Do Races Degenerate?

I. Progress the law of organic life. 1. Implied in the derivative origin of species, p. 269 — 2. Implied equally in the fiat theory of specific origins, p. 270 — 3. Implied in the educability of intelligence, p. 272 — 4. The law and the fact of progress revealed in organic history, p. 273 — 5. The law and the fact of progress revealed in human history, p. 273 — II. Deteriorations are partial and abnormal. Structural deterioration discriminated from cultural, p. 274 — The inferiority of the Negro is structural, p. 275 — Cultural deterioration defined, p. 276 — Cases of deterioration are generally cultural. Examples, p. 277 — Remarks on a case cited by Dr. Whedon, p. 277 — But even cultural degradation never becomes race-wide, p. 281 — Résumé, 282.

CHAPTER XVIII.

Theological Consequences of Preadamitism.

The conclusion both scientific and scriptural, p. 283 — 1. A discovery of ethnic facts has no relation to the nature of moral plans, p. 284 — 2–3. The Negro recognized as subject of salvation, p. 284 — 4. Preadamitism does not mean plurality of origins or of species, p. 284 — 5. Adam created by derivation, p. 285 — 6. A plan retroactive from Christ to Adam may have reached further back, p. 285 — Whedon on the harmony of Preadamitism with "the scheme of redemption," p. 286 — Dr. M'Causland on the same, p. 288 — Bishop Marvin on the extra-mundane efficacy of the "plan of salvation," p. 289 — Chalmers, Miller, Brewster and others, 291 — Conceptions of Genesis coördinated with the doctrine of Preadamitism, p. 293.

CHAPTER XIX.

Genealogy of the Black Races.

The genetic relationship of races generally admitted, p. 297 — Interest of remnants of tribes and races, p. 298 — Fundamental bases of racial classification, p. 298 — Classification based on skin and hair, p. 299 — Haeckel's classification, p. 299 — A table of affiliated classification of types of mankind, p. 302 — The Australians assumed as the lowest race, p. 307 — The two tufted-haired races, p. 307 — Curious resemblances of Hottentots and Papuans, p. 308 — Not, however, to be taken as evidence of close affinity, p. 309 — Transition from Hottentots to Negroes, p. 310 — The Papuans, p. 310.

CHAPTER XX.

Genealogy of the Brown Races.

An apparent transition between Mongoloids and Papuans, p. 311— A more obvious transition between Dravida and Australians, p. 312 — Suggested affinity between Mongoloids and Hottentots, p. 313 — Diagram of suggested affinities between the Black and the Brown races, p. 314 — Affinity between Dravida and Mongoloids, p. 314 — A diagram of more probable affinities between the Australian and Brown races, p. 315 — The Malay Mongoloids nearest the Black races, p. 315 — Intermediate position of the Indo-Chinese, p. 317 — The Japanese, Coreans and Tunguses closely related, p. 318 — Aboriginal Americans. The divergent Eskimo, p. 320 — Transition to Asiatics, p. 320 — Affinity between Namollo and Chinese and Japanese, 322 — Ale-uts and Japanese, p. 323 — Linguistics as accessory in ethnology, p. 324 — The related Tlinkets and their allies, p. 326 — The affiliation extends to the Selish and Sahaptin Families, p. 328 — The Californian tribes mutually related, and allied also to the other Pacific coast Indians, p. 328 — Facility of linguistic changes among west coast Indians, p. 329 — All the west coast Indians closely related and Mongoloid, p. 330 — Belong also in one great group with the civilized Indians, p. 333 — Even the Patagonians related to Eskimo, p. 337 — The mound-builders belonged to the same type, p. 339 — The Hunting Indians. Tinneh Family, p. 342 — The Algonkin, Iroquois, Sioux and other Families, p. 342 — Ethnic relations of the Hunting Indians and the Polynesians, p. 343 — Difficulties met, 344.

CHAPTER XXI.

Genealogy of the White Race.

The Brown races probably preadamic, p. 346 — Approximation of the Adamic race to the Mongoloid Turks, p. 347 — More closely approximated to the Dravida, p. 348 — Citation of authorities, p. 348 — Genealogical tree of types of mankind, p. 352 — Preadamitism not dependent on any genealogical scheme, p. 351.

CHAPTER XXII.

The Cradle of Humanity and the Dispersion of the Black Races.

Indications of a primitive point of divergence of humanity, p. 354 — Method of ascertaining the location of this point, p. 355 — Bearing of the geographical distribution of Primates, p. 357 — A lost

continental area in the Indian Ocean, p. 359 — The conclusion anticipated on more general grounds, p. 359 — The distribution of palms points to a similar conclusion, p. 360 — Lemuria the probable cradle of humanity, p. 361 — Further reference to obliterated land areas, p. 362 — The primitive eastward and westward stems, p. 363 — The Australian stem, p. 364 — Former extent of the Australian type, p. 364 — Derivation of the Tasmanians and Papuans, p. 365 — Hypothesis that the Papuans preceded the Australians, p. 366 — Ramifications of the African stem, p. 366 — Advent of Hottentots, p. 367 — Grounds for delineation of African movements, 367.

CHAPTER XXIII.

Dispersion of Asiatic Mongoloids.

Earliest ramifications of the Mongoloid type, p. 369 — Dispersion of the Malays, p. 369 — Malayo-Chinese origin, p. 371 — Prechinese and Chinese movements, p. 371 — All the Turkish tribes, on the contrary, have moved southwestward, p. 372 — The Mongols, also, have always swarmed from the northeast, p. 374 — The Tunguses of northern origin, p. 374 — Routes pursued by ethnic movements in Asia, p. 375 — There must have been a primitive northeastward current, p. 375 — The radiant point of Asiatic migrations, p. 376 — The Miaotse, the Coreans and Japanese, p. 376 — Max Müller's linguistic theory of Asiatic movements, p. 376 — Movements of Ural-Altaics, p. 377 — Qrigin of the European troglodytes and their wanderings, p. 377 — Plato's account of Atlantis, p. 379 — Corroboration from Theopompos, Timagenes and Marcellus, p. 380 — Modern soundings reveal the stump of Atlantis, p. 381 — The populations of Atlantis, p. 382.

CHAPTER XXIV.

Dispersion of American Mongoloids.

Ethnic relations of American indigenes, p. 383 — Opinions concerning the origin of Americans, p. 384 — Opinions concerning the origin of American civilizations, p. 386 — Affinities of Sedentes as a datum for conclusions touching migrations, p. 388 — General movements of Eskimo, p. 388 — Movements of occidental tribes, p. 390 — Movements of Mexican peoples — The Toltecatlac Family, p. 391 — The Nahuatlac Family, p. 392 — Movements extended into central America, p. 393 — Into the Isthmus and thence to Peru, p. 394 — Indications in Chili and Patagonia, p. 395 — Conclusion, p. 396 — Hostility between *Sedentes* and *Vagantes*, p. 396 — Practicability of routes by Behring's Straits and sea, p. 398 — Polynesian

route to America, p. 400 — Asiatic origin of Sedentes, p. 404 — Polynesian origin of Vagantes, p. 405.

CHAPTER XXV.

Dispersion of the Dravidians and Mediterraneans.

Dispersion of Dravidians, p. 407 — Point of divergence of the Adamites, p. 408 — The dispersion of the Adamites blends itself with the dispersion of the Noachites, already traced, p. 408 — Assumptions of a non-Asiatic origin for Mediterraneans, p. 409 — Czarnotski, Lelewel, Schulz, Omalius d'Halloy, Benfey, Fligier and Poesche, p. 410.

CHAPTER XXVI.

Condition of Primitive Man.

Man's educability, p. 412 — Man's advancement from lowest racial condition, but not necessarily from a brutal condition, p. 412 — The European Troglodytes did not exemplify primitive humanity, p. 413 — Their *physical* characteristics, p. 413 — Their *social* and *intellectual* characteristics, p. 414 — Their *æsthetic* characteristics, p. 416 — Their *religious* indications, p. 417 — The low grade of prehistoric man in Europe was cultural, not structural, p. 417 — These men probably quite inferior to the primitive Adamites, p. 418.

CHAPTER XXVII.

Antiquity of Man.

Three different aspects assumed by the discussion, p. 419 — I. The Epoch of the First Man undiscoverable, p. 419 — II. Epoch of the Stone Folk. Its assumed remoteness, p. 420 — This assumption erroneous, p. 420 — Grounds of the opinion of the high antiquity of the Stone Folk. 1. Preglacial remains of other animals mistaken for human. Scratched bones of Saint Prest, p. 422 — Scratched bones of extinct mammals in the marls of Léognan, p. 422 — Supposed Miocene markings at Puancé and Thenay, p. 423 — 2. Human remains erroneously supposed preglacial. Human bones at Le Puy-en-Velay, p. 423 — Flints in the river drifts of the Somme, p. 424 — Human bones at Colle del Vento, p. 425 — Human pelvis at Natchez, p. 425 — Man lived in Europe during the decline of the continental glacier, p. 426 — Probable Pliocene remains of man in California, p. 426 — Relation of mankind to events of the Glacial period, p. 429 — Men crowded northward on the retreat of the continental glacier,

p. 430 — Grounds of supposed high remoteness of Glacial period. I. Astronomical Hypotheses, p. 431 — II. Contemporaneousness of man with animals now extinct, p. 432 — Extinctions known to have taken place in modern times, p. 433 — Many species plainly aproaching extinction, p. 434 — Other extinctions apparently recent, p. 435 — III. Magnitude of geological changes since man's advent. First impressions, p. 436 — But great events have taken place in times geologically recent, p. 437 — Some lessons from Alpine glaciers, p. 437 — Glacier-relics in the United States, p. 439 — Sundry recent but great geological events, p. 439 — Attempts to reach a numerical expression for man's antiquity in Europe, p. 441 — Historical deductions accordant with the final result from archæology, p. 442.

CHAPTER XXVIII.

The Patriarchal Periods.

The demand for more time than the Usherian chronology affords, p. 446 — Demand arising from fourth chapter of Genesis, p. 446 — Similar demand created by the narrative of the tenth chapter, p. 447 — And again by the eleventh chapter, p. 448 — Crawford's exposition of patriarchal chronology, p.449 — This sustained by the known longevity of Egyptians and Chinese in ancient times, p. 452 — Chronological result, p. 453 — Its establishment helpful to the rational credibility of the Pentateuch, p. 453.

CHAPTER XXIX.

Preadamitism in Literature.

The doctrine of Preadamitism first deduced from Scripture, p. 454 — The writings of Peyrerius, p. 454 — A London work on Preadamites in 1657, p. 455 — Biblical authority in science 200 years ago, p. 455 — Narrow views of the Bible still in existence, p. 456 — The rejection of collateral aids a virtual attack on inspiration, p. 456 — Repressive theology silencing Peyrerius, p. 457 — Principal points in the works of Peyrerius, p. 458 — Positions now accepted or defensible on a Scriptural basis, p. 460 — Bory de St. Vincent, Hombron and Van Amringe, p. 461 — "Genesis of the Earth and Man," p. 462 — Examination of its positions, p. 463 — Articles in periodicals, p. 468 — M'Causland's "Adam and the Adamite," p. 468 — Dr. D. D. Whedon on the question of Preadamites, p. 470 — Dr. J. P. Thompson's suggestion, p. 471 — Summary of the present work, p. 472.

LIST OF ILLUSTRATIONS.

FRONTISPIECE: PREADAMITES.

Australian.

Papuan. Wallace, *Malay Archipelago.*

Hottentot. Nott and Gliddon, *Indigenous Races of the Earth.*

Negro.

Eskimo. Photograph of Greenlander, by Dr. E. Bessels.

Mongoloid. Photograph of a Pekingese gentleman. Obtained in Peking by Prof. M. W. Harrington.

Dravidian. A Lurka Kohl. Photograph from Watson and Kaye's *The People of India.*

Chart of Dispersions of the Noachites, according to Genesis . 51

Chart showing Comparative Area of the Genesiacal Nations . 88

Chart of the Dispersion of Races over the Earth . At the end.

Fig. 1. A Tamulian Dravidian. Dalton, *Descriptive Ethnology of Bengal* 55

Fig. 2. A Malay Gentleman. Photograph obtained by Prof. J. B. Steere, in Manila, Luzon 58

Fig. 3. Leleiohoku — brother of King Kalakaua. Photograph from Rev. S. E. Bishop, Honolulu 59

Fig. 4. A Muttuk Man. Thai type of Malayo-Chinese. Dalton, *Descriptive Ethnology of Bengal* 60

Fig. 5. A Fuchow Official (Taotsi). Photograph obtained by Prof. M. W. Harrington 61

Fig. 6. A Japanese Swordsman. Photograph obtained by Prof. M. W. Harrington 62

Fig. 7. An Aged Aïno of Yezo. Photograph obtained by Prof. M. W. Harrington 63

Fig. 8. A Greenland Eskimo. Photograph obtained by Dr. E. Bessels 65

Fig. 9. Red Cloud, Chief of Ogalala Sioux. Photograph by W. H. Jackson 66
Fig. 10. George Tsaroff, native of Unalashka. Photograph . 67
Fig. 11. Venus Kallipygos of the Bushmen. Sketch from model in the *Jàrdin des Plantes*, Paris 72
Fig. 12. Australian of King George's Sound. D'Urville's Atlas. [This is not a typical Australian.] 73
Fig. 13. Tomboua Nakoro. A Papuan of Fiji. Pritchard, *Natural History of Man* 75
Fig. 14. One of the Aëta, from near Manila, Luzon. Photograph obtained by Prof. J. B. Steere 78
Fig. 15. Nubians and Negroes, driven before the chariot of Rameses II. From a reduction by Cherubini . . . 97
Fig. 16. Brachycephalic Cranium, from Tartary. Huxley . 165
Fig. 17. Mesocephalic Cranium (Mediterranean Race) . . 165
Fig. 18. Dolichocephalic Cranium, from New Zealand (perhaps Australian). Huxley 165
Fig. 19. A Common Hawaiian Woman, very characteristic. Photograph from Rev. S. E. Bishop, Honolulu . . . 173
Fig. 20. Outline of the Muzzle of the Polynesian . . . 174
Fig. 21. Outline of the Muzzle of the Negro 174
Fig. 22. A Fair Preadamite of the Chinese Family. Photograph from D. Sewell, Sonora, California 192
Fig. 23. *Rot*, or Egyptian (red) } The Four Races
Fig. 24. *Namahu*, or Semitic (yellow) } of Men known
Fig. 25. *Nahsu*, or Negro (black) } to the Egyp-
Fig. 26. *Tamahu*, or Mediterranean (white) } tians . . 199
Fig. 27. Aryan Portrait from the reign of Rameses II . . 201
Fig. 28. Portrait of a Himyarite Arab, 1500 B.C. . . . 202
Fig. 29. Portrait of a (Kurdish?) Asiatic, 1300 B.C. . . . 202
Fig. 30. Portrait of a Hindu, 1600 B.C. 202
Fig. 31. Portrait of a Mongoloid, 1400 B.C. 202
Fig. 32. Amunoph II, 1727 B.C. 203
Fig. 33. Mother of Amunoph II 204
Fig. 34. A Female Mourner 204
Fig. 35. An Ancient Egyptian Lady with dressed hair . . 204

Fig. 36. Merhet, Prince and Priest, 3400 B.C. 205
Fig. 37. Portrait of a Negro, 1300 B.C. 205
Fig. 38. Negro Prisoner 206
Fig. 39. Negro Prisoner 206
Fig. 40. Captive Negress, 1550 B.C. 206
Fig. 41. Skeleton of an Adamite 248
Fig. 42. Skeleton of a Chimpanzee 248
Fig. 43. Profile of Brain of Orang-Outang. Vogt . . . 249
Fig. 44. Profile of Brain of Bushman Venus. Gratiolet . 250
Fig. 45. Profile of Brain of Gauss, the Mathematician. Vogt 250
Fig. 46. Female Hottentot. Haeckel 253
Fig. 47. Female Gorilla. Haeckel 253
Fig. 48. Kanoa, Governor of Kauai, S. I. Photograph from Miss Luella Andrews, late of Honolulu 316
Fig. 49. Hon. Mrs. Dominis, Sister of the King of the S. I. Photograph from Miss Luella Andrews, of Elmira, New York 318
Fig 50. One of the Lepcha, Aboriginal of Sikhim. Premongoloid type. From Watson & Kaye's Photographs . . 319
Fig. 51. Portrait of Okubo, a Native Japanese. Photograph . 324
Fig. 52. Hupa Woman of California. After Powers, in Powell's *Contributions to North American Ethnology* . . . 331
Fig. 53. Spotted Tail, Chief of Brulé Sioux. Photograph by W. H. Jackson 332
Fig. 54. Numpayu, a Moqui Maiden. Photograph by W. H. Jackson 334
Fig. 55. A Mut-sun Woman of Tuolumne county, California. Photograph from Daniel Sewell, Sonora, California . . 335
Fig. 56. A Quichua Indian of Peru. Photograph obtained at Lima, by Prof. J. B. Steere 336
Fig. 57. A Dravidian of the Toda Tribe, Nilghiri Hills in southern India. Supposed descended from the near ancestry of Adam. Color of skin burnt sienna. From Pritchard, *Natural History of Man* 349

EXPLANATION

OF THE

CHART OF THE PROGRESSIVE DISPERSION OF MANKIND.

This chart is, FIRST, An accurate representation of the distribution of land and water over the surface of the earth. The geography of Africa is from the last edition of Stieler's *Hand Atlas*, and includes the discoveries of Stanley, and other late explorers. Some parts of Polynesia are supplied from Colton's *Atlas of the World*. The marine contour lines are taken from the chart in Wallace's *Geographical Distribution of Animals*. This portion of the chart is printed in blue ink.

SECOND, It is a carefully compiled Ethnographic Chart. The basis of this is Kracher's *Ethnographische Welt-Karte*, in F. Müller's Report on the Ethnology of the Novara Expedition, Wien, 1875. But this has been found inaccurate in many respects, and defective in others, and many improvements have been introduced from Peschel's *Races of Man*, Stieler's *Hand Atlas* (for Africa), Von Richthofen's *China*, W. H. Dall's *Alaska and its Resources* and *Tribes of the Northwest*, in Powell's *Contributions to North American Ethnology*, Vol. I; George Gibb's *Tribes of Western Washington and Northwestern Oregon*, in the same; Stephen Powers' *Tribes of California*, in Vol. III of the same, and H. Bancroft's *Native Races of the Pacific States*. This part of the chart is in

black ink, with typographical discrimination between important and comparatively unimportant ethnic groups.

Third, it is an elaborately studied chart of Ethnic Migrations, not based on any other attempt of the kind. It is prepared from a large number of accessible sources of information. The classes of data which have guided in laying down the lines are, 1. Knowledge of migrations, either historical or traditional; 2. Inferences of migrations, based on ethnic and linguistic affinities; 3. Inferences based on analogies in the distribution of lower animals and plants; 4. Confirmations of such inferences deduced from the geological evidences of different distributions of land and water in prehistoric times.

Memorandum. The indications of this chart vary from those of the Ethnographic Table on pages 302–306, in tracing the Vagantes or Hunting Tribes of America to Polynesian Mongoloids, and in making the Brown races preadamic. It varies in some minor particulars from the Genealogical Table on pages 352 and 353. These deviations are intended to exemplify the allowable differences of opinion under the general doctrine of Preadamitism.

PREADAMITES.

CHAPTER I.

SOME TRADITIONAL BELIEFS.

THERE exists a collection of very ancient Hebrew documents, in which an account is given of the origin of the world and its inhabitants. From a very remote period these documents were understood to teach the following things:

1. That the world, with all it contains, was created by God.

2. That this creation took place about 4,000 years before our era.

3. That the work of creation extended over the period of six days.

4. That the first man, Adam, was created on the sixth day.

5. That the first woman, Eve, was formed of a rib taken from the side of Adam.

6. That Adam lived nine hundred and thirty years, and his immediate posterity attained a similar longevity.

7. That the primitive seat of the human species was in western central Asia.

8. That after the lapse of about 1,656 years, a universal deluge destroyed all the posterity of Adam, except Noah and his family; and all animals, except those preserved in the "ark" with Noah.

9. That all the existing races of men are descended from Noah.

10. That the black races of Africa are descended from Ham, a son of Noah.

With this traditional understanding of the Hebrew documents, our standard English translation of them was framed to give expression to such conceptions; and these have very generally been received as representing the facts touching the origin and early history of the world and its inhabitants.

In glancing over this series of propositions, we are at once impressed by a remarkable circumstance. Save the enunciation of the supernatural origin of all things, these statements all relate to questions touching the order of the natural world. They concern things about which it is supposable something might be learned by observation and investigation. They are all subjects which fall under the legitimate cognizance of what we call "science." The truth of these nine propositions is neither self-evident nor to be confirmed by any *à priori* reasoning. *The test of their truth must arise from investigations of the strictly scientific order.* If we accept them as true, on the strength of ancient tradition or high authority, they are still secular truths, and fully amenable to the results of scientific research; and, moreover, tradition and authority are, in turn, amenable themselves to the test of rigorous examination.

The allegation that the world was originated about six thousand years ago, and that the process covered six literal days, is one which may be examined in all the light which the sciences of geology and cosmogony are able to throw upon it. That the first man came into existence but six thousand years ago, and, with his immediate successors, attained an age ten

times as great as modern men, is a question to be examined in the light of anthropology, ethnology, archæology and history. That the first woman was framed from a rib of the first man is a statement of the scientific order, which must be examined in the light of all organic analogies. That the western center of Asia was the primitive seat of the human species, can certainly be confirmed or discredited by researches touching early traditions, migrations and monumental records. That a deluge swept over the world 4,227 years ago which destroyed all animal life, except Noah and his family and the animals with him in the ark, is a proposition which it is perfectly legitimate to examine in the light of human and zoölogical history, and the relations of organic life to land, water, climate and other conditions. That the black and brown races are descended from a white ancestor, and that all their racial divergence has taken place within little more than 4,000 years, is a proposition which may be fairly tested by the analogies of what we have observed during the historic period.

I wish also squarely to admit that, in a search after truth, we are not foreordained to that mode of investigation known as "scientific." If there be any other method of attaining to the discovery of truth, it is not only open to us, but candor compels us to avail ourselves of it. It is conceivable that psychology or metaphysics may afford ground for valid inference on certain points. It is proper to remember, also, that starting as we do, with a recognition of creative agency in the world, it is always allowable to suppose that any result not yet traceable to natural antecedents has come into existence by the direct action of supernatural power. It may be proper, also, to enunciate here the fundamental principle that,

however remote, and through whatever number of links in the chain of causation the remotest discovered physical antecedent of an event may be, no physical antecedent can be viewed as essentially causal; and we are constrained by a philosophic necessity to posit self-existent and self-sufficient causation at every beginning.

Viewing the nine propositions already cited as amenable to the method of scientific investigation, it is a fact of great significance that the forms of knowledge by which they are to be tested have all come into existence in modern times. The results attained through these avenues of research were not in possession of the world in the patristic age, nor in mediæval times — nor even at the date of our standard translation of the sacred scriptures. Whatever light the modern sciences are admittedly capable of shedding upon these subjects was entirely wanting to King James' translators, in searching for the meaning of terms which belonged to a language then centuries in disuse. They were compelled to produce a version which expressed contemporary beliefs and conceptions. Any other version would have been pronounced incredible, absurd and antibiblical.

These propositions relate to subjects in reference to which evidence is capable of accumulation through research. Modern researches having accumulated evidence, the ancient conceptions respecting the doctrines of Genesis have been considerably modified. It has been shown that the world and its inhabitants are vastly more than six thousand years old, and that their development extended over hundreds of thousands of years, instead of six days. Biblical scholars generally agree that the Hebrew text admits of interpretation in accordance with these conclusions.

Again, it has been shown highly improbable, and organically impossible, that all the world should have been restocked from the posterity of the animals preserved in Noah's ark; and modern exegesis generally admits that the universal terms employed in the biblical description of the deluge refer only to the world of Hebrew tradition. As all the propositions enumerated relate to occurrences which transcend all knowledge in possession of the world before modern times, it would not be surprising if our biblical translators had failed, in still other instances, to seize upon the unknown idea, and render it in our vernacular. Accordingly, opinion is already divided respecting the total destruction of mankind by the deluge of Noah, and the descent of all existing races from the sons of Noah. Recent biblical studies have shown, also, that the great longevity of the patriarchs is a conception which may soon have to be abandoned. This will create a necessity for the adjustment of biblical chronology on some new basis.

Should it result that human conceptions have not attained to the divine truth in a single one of the nine propositions, this will not prove that the divine truth was not contained in the original documents, but only that it so far transcended uninspired knowledge or apprehension that uninspired men have been unable to grasp it except through processes of slow ratiocination. Nor will such a result prove the impossibility of such an origin and primeval history of things as Jew and Christian have commonly conceived. It must be held, on grounds deeper and firmer than any scientific inference, that all finite existence has been called into being by a Power which transcends the finite, and that such Power could have raised up the world as easily in six days as in six millions

of years, and could have repopulated the earth from the life in Noah's ark, and could have suddenly blackened the skin of Ham's posterity. Admitting the omnipotence of the Creator, the inquiry which the human mind feels itself impelled to institute is concerning the *methods which Omnipotence has actually pursued.* The search for these methods is certainly worthier than the blind and stubborn adherence to traditional beliefs, which conflict with the results of observation and induction. We shall stand higher at the court of heaven for respecting the verdict of our God-given intelligence, than for taking up arms in defense of a fallible interpretation, which dethrones intellect and insults the Author of all truth.

CHAPTER II.

BIBLICAL LANGUAGE.

I PROPOSE to conduct an inquiry respecting the tenability of the opinion that all mankind are descended from the biblical Adam. Obviously there are two alternative positions which may be assumed in reference to Adam.

1. Adam was absolutely the first human being, and was, in every respect, such as to fill the requirements of that position.

2. Adam was the immediate progenitor of the nations which figure in biblical history, and hence must not be expected to answer the requirements of the primitive ancestor of all mankind.

Which is the Adam intended in our sacred annals? If we decide that Adam means the first man absolutely, then the following conditions must be found fulfilled:

(1) If we hold to a universal destruction by the biblical deluge, we must show that all existing peoples have descended from Noah.

(2) If we deny the universality of the deluge, we must show (*a*) that it reached as far as the human species had been dispersed, in which case all men must be traceable to Noah; or (*b*) that all existing peoples are traceable to Adam, whether through Noah or not.

(3) We must show, assuming the Adamic origin of all men, that time sufficient has elapsed since the ad-

vent of Adam to effect the wide dispersion of peoples, and the existing divergence of species and races.

(4) We must show, on the same assumption, that the racial divergences which exist are in accordance with the observed tenor of biological facts.

(5) We must show that all this is what lies within the purview of the Bible in treating of Adam and his posterity.

After long and impartial study of the data for this discussion, I feel convinced that such demonstrations cannot be made; and I shall proceed to indicate the evidences which seem to sustain the opinion that the biblical Adam was not absolutely the first man.

Attention should first be directed to the text in which the biblical genealogies are recorded. It will not be contended that our standard English translation possesses supreme authority. Its divergences from the punctuated Hebrew have attracted the attention of all students. Unlimited testimony to this effect might be adduced. The fact has pressed upon modern scholarship with such weight that one or more new English translations are at this moment in progress. This condition of the English translation is not surprising, whether we consider the state of contemporary learning at the date of its production, the fact that it was chiefly based on the Septuagint rather than the Hebrew version, or the infantile condition of Protestant Hebrew erudition in King James' time, and the astonishing unfamiliarity with the Hebrew which characterized the body of translators.

But the standard Masoretic Hebrew text itself is far from infallible, as the various readings evince. "No less than 30,000 various readings of the Old and New Testaments have been discovered . . . and putting alterations made knowingly, for the purpose of

corrupting the text, out of the question, we must admit that from the circumstances connected with transcribing, some *errata* may have found their way into it, and that the Sacred Scriptures have, in this case, suffered the same fate as other productions of antiquity. . . . In the last 220 years critical learning has so much improved, and so many new manuscripts have come to light, as to call for a revision of the present authorized version." *

To the same purport is the verdict of another evangelical authority: "In the Hebrew manuscripts that have been examined, some 80,000 various readings actually occur as to the Hebrew consonants. How many as to the vowel-points and accents, no man knows." †

Further, as to the standard Hebrew text, it is a fact of notoriety that the subdivision into verses was not begun before the thirteenth century after Christ; that the Masoretic punctuation, including nearly all the vowels now employed in pronouncing the Hebrew, was not introduced till the period between the sixth and ninth centuries after Christ; that the separation of the text into words does not exist in the oldest manuscripts, and was effected not earlier than the tenth century after Christ; and that even the *square-letter* form of the radicals or consonants was not employed before the third century after Christ.

Nevertheless, it is generally admitted, both by those who hold to the divine inspiration of our Scriptures and those who deny it, that the original Scripture did not vary substantially from that which has

* Sears, *History of the Bible*, 1844, pp. 651, 665.

† Rev. Prof. Moses Stuart, *Critical History and Defense of the Old Testament Canon*, Andover, 1835, p. 192.

come into our possession. The next problem is, therefore, to ascertain its meaning.

In approaching our principal inquiry, it is necessary to ascertain first, whether it appears from biblical, linguistic, ethnological, archæological or other evidence, that all the present populations of the world are descended from Noah. The tenth chapter of Genesis claims to inform us respecting the earlier ramifications of the posterity of Noah, and the distribution of the Noachites down to the date of the compilation of the account. For our purpose it is immaterial whether Moses penned this, or adopted it from some Chaldæan source, or found it constituting a portion of a primitive patriarchal bible, or, finally, never had any hand in placing it in the body of Hebrew literature. Is it plausible; is it a true account, as far as we can judge? I confess that my own study of this venerable document has caused a feeling of amazement at its close conformity with information which comes to us from many other sources. It starts irresistibly the inquiry how such knowledge came into possession of the compiler thousands of years after some of the events, and across a dark chasm of social rudeness and ignorance of the art of writing. It excites my astonishment that the languages, customs, traditions and homes of the tribes of the oriental world should, to this day, preserve and reflect so much of the condition of the world at the date of the preparation of this wonderful, but unpretentious, genealogical table.

Looking at the verbiage of the tenth chapter of Genesis, as it stands in our English version, it seems at first view to imply that the proper names employed are names of men.* This impression is strengthened

* This genealogical list is reproduced in 1 Chron. i, where it is identical, except as follows,—Shem: Arphaxad's son Salah is

by the eleventh chapter, which takes the lineage of Shem, and under the same names employs language distinctly enunciating their personality, and even ascribing ages to them, severally, at which their eldest sons were born, and at which they severally died. The opinion that such is the true purport of these documents seems to be popularly entertained. But I think the opinion erroneous, for the following reasons:

1. The tenth chapter is the older document, and, presumptively, possesses the highest authority. Its accuracy has been established by a world of critical investigation. The eleventh chapter must be construed in subordination to the tenth.

2. Even the English version of the tenth chapter affords numerous indications that the proper names are intended to apply generally to cities, countries and peoples — not to individuals. Canaan begat "the Jebusite and the Amorite and the Girgasite," etc. Manifestly, these are meant for tribal designations. And Joktan begat "Ophir and Havilah and Jobab." Ophir is nowhere mentioned in the Old Testament except as a country. "And they came to Ophir and fetched from thence gold." * "Three thousand talents of gold, of the gold of Ophir," † etc. Havilah, in a preceding document,‡ had been mentioned as "the

Shelah; Joktan's son Obal is Ebal; Aram's four sons are set down as brothers, and Mash is Meshech. Ham: Phut is Put. Japheth: Ashkenaz is (only in our version)Ashchenaz, and Dodanim is (in the Hebrew) Rodanim. These variations are entirely trifling, and have resulted, obviously, from errors of transcribers; but it is impossible to say which list approaches nearest to the common original.

* 1 Kings ix, 28. See also x, 11; xxii, 48.

† 1 Chron. xxix, 4. See also 2 Chron. viii, 18; ix, 10; Job xxviii, 16; Ps. xlv, 10; Isa. xiii, 12.

‡ Gen. ii, 11.

whole land of Havilah," encompassed by one of the rivers of Eden. In a later document it is said: "And they dwelt from Havilah unto Shur."* And again: "And Saul smote the Amalekites from Havilah until thou comest to Shur."†

3. Mizraim is a Hebrew dual, and is universally recognized as signifying the land of Egypt. From Mizraim came Ludim and Anamim and Lebahim, etc. These are all plural forms, and naturally denote peoples. The land of Egypt is designated by a dual name, perhaps in allusion to upper and lower Egypt — a division perpetuated by Ptolemy.

4. The usage of the Hebrew is in perfect accord with the impersonal construction of all these proper names. "And ships shall come from the coasts of Chittim and shall afflict Asshur, and shall afflict Eber, and he also shall perish forever."‡ "And Pul, the King of Assyria, came against the land."§ "The ships of Chittim shall come against him."‖ "For pass over the isles of Chittim."** "I will set a sign among them, and I will send those that escape of them unto the nations, to Tarshish, Pul and Lud that draw the bow, to Tubal and Javan, to the isles afar off."†† "Cush and Phut that handle the shield, and the Ludim that handle and bend the bow."‡‡ "Cush and Phut and Lud, and all the mingled people, and Kub and the men of the land that is in league."§§ The more familiar use of "Israel" and "Judah,"

* Gen. xxv, 18. † 1 Sam. xv, 7. ‡ Numbers xxiv, 24.

§ 2 Kings xv, 19. See ver. 29; xvi, 7; xvii, 3, 23; xviii, 13; xxiii, 29; 1 Chron. v, 6; 2 Chron. xxviii, 16; xxxii, 1, 11, etc. etc.

‖ Dan. xi, 30. ** Jer. ii, 10. †† Isa. lxvi, 19.

‡‡ Jer. xlvi, 9 (the proper names are taken from the Hebrew). See also Ezek. xxvii, 10.

§§ Ezek. xxx, 5. The proper names again are taken from the Hebrew.

"Jacob," "Benjamin," and many other personifications of countries and peoples, will occur to the reader's mind.

Confirmatory of this view, the reader will notice that in the tenth chapter of Genesis, Uz, Hul, Gether and Mash (Meshech) are put down as sons of Aram; while in 1 Chronicles i, 17 they are called the sons of Shem. Now, unless we have here a clerical error,—that is, if both statements are correct,—it can only be on the supposition that BeNI (sons) means in both cases "posterity" rather than "sons" in the strict sense. Finally, in Job i, 1, and Jeremiah xxv, 20, Uz seems to denote a country—"the land of Uz."

5. This usage has been common among other ancient peoples. As is well known, Hellas is employed as a personification of the Hellenes; Pelasgos, of the Pelasgians; Dorus, of the Dorians; Lydus, of the Lydians. So of Ion, Achæus, Æolus and many other names which, probably, have never been anything more than eponyms. Tacitus, speaking of the ancient Germans, says: "Celebrant carminibus," etc.—"They celebrate in ancient hymns what with them is a kind of tradition and history, the god Tuisco [corresponding to Mars] born of the earth, and Mannus, his son, origin and founders of their nation. To Mannus [hence the German 'mann' and English 'man'] they assign three sons, from whose names the tribes nearest the ocean are called *Ingævones*; those in the middle [inland], *Hermiones*, and the others *Istævones*." * The primitive nomina were Ingæv, Hermin and Istæv; and archæologists are able to assign to each of these sons or stocks the German tribes of which it was the primitive source. The case is quite parallel with the method

* See Prichard, *Researches*, III, 348.

of the tenth chapter of Genesis. In fact, our modern practice of applying the names of men geographically is perfectly analogous.

6. Modern commentators put such constructions on the proper names in the tenth chapter of Genesis. Dr. Adam Clarke says: "Moses does not always give the name of the first *settler* in a country, but rather that of the people from whom the country afterward derived its name." He mentions Mizraim and his so-called sons, "which are all *plurals* and evidently not the names of *individuals*, but of families and tribes. In the posterity of Canaan, we find whole nations reckoned in the genealogy, instead of the individuals from whom they sprang; thus the Jebusite, Amorite, Girgasite, Hivite, Arkite, Sinite, Arvadite, Zemarite and Hamathite were evidently whole nations or tribes which inhabited the Promised Land, and were called Canaanites, from Canaan, the son of Ham, who settled there. Moses, also, in this genealogy, seems to have introduced even the names of some *places* that were remarkable in the sacred history, instead of the original *settlers*: such is Hazarmaveth, and, probably, Ophir and Havilah. But this is not infrequent in the sacred writings, as may be seen in 1 Chron. ii, 51, where Salma is called the *father of Bethlehem*, which certainly never was the name of a man, but of a *place*, sufficiently celebrated in sacred history; and in chap. iv, 14, where Joab is called the father of the valley of Charashim,* which no person could ever suppose was intended to designate an *individual*, but the society of *craftsmen* or artificers who lived there."†

Kurtz also says: "The names denote, for the most

* As Washington was "the father of his country."

† Adam Clarke, *Commentary, ad loc.*

part, groups of people whose name is carried back to the ancestor, forming one united conception." * Dr. Eadie says: "The world must have been peopled by tribes that gave themselves and their respective regions those several names which they have borne for so many ages. . . . Many of the proper names occurring on this roll remain unchanged as the appellations of races and kingdoms. Others are found in the plural or dual number, proving that they bear a personal and national reference (Genesis x, 13); and a third class have that peculiar termination which, in Hebrew, signifies a sept or tribe (x, 17).† Finally Canon George Rawlinson concludes: "The time is gone by when nothing more was seen in the list of names to be found in this chapter than a set of personal appellations, the proper names of individuals. . . . It may be assumed [for reasons stated] that the object of the author of the tenth chapter of Genesis was to give us, not a personal genealogy, but a sketch of the interconnection of races."‡

This conclusion must now seem entirely obvious; but to grant it will overthrow completely the current biblical chronology. Aside from this, however, it becomes intimately accessory to the explanation of the biblical etho-genealogy. This will appear as we proceed.

* Lange, *Commentary*, Genesis, p. 346.

† Eadie, *Early Oriental History*, in Ency. Metrop., London, 1852, p. 2. See also Bochart, *Phaleg, seu de Dispersione Gentium*, etc., 1651; Dubois de Montpereux, *Voyage autour du Caucase*; Rosenmüller, *Alterthumskunde*, Theil II, p. 94.

‡ Rawlinson, *Origin of Nations*, pp. 168, 169.

CHAPTER III.

THE HAMITES AND THEIR DISPERSION.*

BIBLICAL researches have accomplished a result which at first view would seem unattainable. They have ascertained with considerable certainty the regions in which most of the peoples were located whose names are mentioned in the tenth chapter of Genesis. I propose first to go through the list for the purpose of impressing the reader with the just conviction that we indulge in no guess-work in saying that we know to what regions the posterity of Noah were dispersed. As the oldest civilizations of which we have any knowledge were Hamitic, I begin with Ham.

The Hebrew word KhâM† is defined by Gesenius as signifying "*warm*, *hot*, *e.g.* of bread just baked; Joshua ix, 12." It is also given as the name of a son of Noah, whose posterity spread over the warm or hot regions of the known world. Gesenius regards it also as probably the domestic name of Egypt. Other authorities vocalize the name of Egypt as KheM, which is also the name of the Egyptian god Pan, or

*The reader will find a "Chart of Dispersions of the Noachites" at the end of the fifth chapter.

†I do not deem it desirable to introduce Hebrew characters in a work intended for popular reading. I shall, therefore, transliterate Hebrew names by employing large Roman capitals for the Hebrew radical letters, and small (lower case) letters to express the aspirates and the customary vowel sounds. The circumflex (ˆ) over "a" denotes the "long broad sound" as in "fall."

the generative principle of nature.* Plutarch says the name alludes to the blackness of the alluvial soil of Egypt.† So the Greek *Χαμαί* signifies *on the ground.* To the same root belong *humi*, *humus*, *humilis* in Latin, and *humility* and cognate words in English and other languages. If it be insisted‡ that the word necessarily signifies "black," the allusion may as naturally be to the color of the soil as to the color of the people — the more so, as the people were never blacks, but always contrasted themselves with the blacks.

The tenth chapter of Genesis gives us the BeNI-KhâM, *children of Ham*, which means the descendants of Ham; as "children of Israel" signifies always the descendants of Israel.

CUSH.

CUS or CUSh is a name whose signification is in dispute. Applied to a country, it is said to signify Æthiopia; but where was Æthiopia? The answer to this question will follow from a discovery of the distribution of the Cushites.

SeBA or Seba, the first-named affiliation of Cush, is sometimes located in the south of Egypt; but better and fresher evidence tends to locate it in the province of Oman, in southern Arabia.§

* Rawlinson, *Herodotus*, Vol. II, p. 20, note.

† Plutarch, *De Iside et Osiride*, c. 33. See McClintock and Strong, *Cyclopædia*, art. "Egypt," Vol. III, p. 75.

‡ Compare Whedon, in *Methodist Quarterly Review*, July, 1878, p. 564.

§ I do not consider it necessary to cite the voluminous authorities which sustain the conclusions I am about to enunciate. I may state once for all, that some of the chief investigators on whose authority these and later conclusions rest are the following: — Samuel Bochart, *Geographia Sacra*, especially *Phaleg, seu de Dispersione Gentium et Terrarum divisione facta in ædificatione turris Babel*, fol. 1651; Knobel,

KhaUILâH or HAVILAH designates a colony of Cushites, who settled on the west shore of the Persian Gulf, in Arabia. Our genealogical table gives us two Havilahs, and it is not possible to determine whether any particular reminiscence belongs to the Cushite or the Joktanide Havilah.

SaBTtâH or SABTAH is generally understood to have been located in eastern Arabia, on the Persian Gulf, or on the contiguous shore of the Indian Ocean.

RaAMâH or RAAMAH were probably the old Rhamenitidæ, and their country is believed to be pointed out by the modern Ramss, a port of Arabia just inside the Persian Gulf. The two offshoots of Raamah — SBÂ, SHEBA, and DDâN, DEDAN — were located in the south of Arabia, the latter on the Indian Ocean. Sheba

Die Völkertafel der Genesis, Giessen, 1851; George Rawlinson, *The History of Herodotus*, 4 vols. (translation with copious notes) Amer. ed. 1859, and *The Five Great Monarchies of the Ancient Eastern World*, 3 vols. 2d ed., New York, 1871; *Id.*, *Persian Cuneiform Inscription of Behistun*, 1847 (See also *Herodotus*, Vol. II, note C); *Id.*, *The Origin of Nations*: I. *On Early Civilizations*; II. *On Ethnic Affinities*, etc., New York, 1878; Hales, *Analysis of Chronology*, 2d ed., 1830; Cahen, *La Bible, Traduction Nouvelle*, Paris, 1831; François Lenormant, *Manuel de l'Histoire Ancienne de l'Orient*, a Manual of the Ancient History of the East, Amer. ed., 1871; Dubois de Montpereux, *Voyage autour du Caucase, chez les Tcherkesses et les Abkhases en Colchide, en Géorgie, en Arménie et en Crimée, avec un Atlas géographique, pittoresque, archéologique, géologique, etc.*, Paris, 6 vols., text 8vo, 1839–43; Gliddon, *Otia Ægyptiaca*; Nott and Gliddon, *Types of Mankind*, 8vo, pp. 738, with charts and other illustrations, Philadelphia, 1854; *Id.*, *Indigenous Races of the Earth*, 8vo, pp. 656 (with charts and illustrations), Philadelphia, 1857; De Saulcy, *Recherches sur l'Écriture cunéiforme Assyrienne*, Paris, 1848; Champollion, *Grammaire Ægyptienne*, Paris, 1836, and *Dictionaire Ægyptienne*, Paris, 1841; Volney, *Recherches Nouvelles*, Paris, 1822; Mariette, *Abrégé de l'histoire d'Egypte*, Paris, 1867; Bunsen, *Ægypten's Stelle in der Weltgeschichte*, Göttingen, 1845, (translation, with additions, by Dr. Birch,) *Egypt's Place in Universal History*, London, 1867, New York, 1868; Lepsius, *Chronologie der Ægypter*, Berlin, 1849; Kenrick,

must be some way connected with the ancient Sabæans, and Dedan seems to be perpetuated in Dadan, an island in the Persian Gulf.*

SaBTKÂ or Sabtecha was located by Josephus in Abyssinia; but Forster thinks the *Sabatica Regio* of the ancients more probable. This is in Arabia, near the mouth of the Euphrates.

NiMRôD or Nimrod settled, beyond all dispute, in the plain of Shinar, which answered to Mesopotamia and the bordering country. Our version says he was a "great hunter"; but some of the authorities, on the strength of affiliated roots, give us rather, "a great landed proprietor," in obvious allusion to the biblical statements concerning his extended dominions. He is said to have built the cities of Babel, Erech, Accad and Calneh. Our version says that "out of that land went forth Asshur and builded Nineveh"; but the marginal reading is more consistent: "He [Nimrod] went out of that land [Babylon] into Asshur [Assyria]." Hence the Assyrian cities of Nineveh,

Phœnicia and Ægypt under the Pharaohs; Gesenius, *Geschichte der Hebräischen Sprache*, 1815; Fresnel, *Inscriptions Himyariques*; Burckhardt, *Arabia*; Layard, *Babylon* and *Nineveh and its Remains*; Brugsch, *Histoire d'Egypte*, Leipzig, 1859, and *Scriptura Ægyptiorum Demotica*, Berlin, 1848; Raoul-Roquette, *Archéologie comparés*; Hunt, *Himyaric Inscriptions*, 1848; Forster, *Sinaic Inscriptions*; Prichard, *Researches in the Physical History of Mankind* and *Natural History of Man*, 4th ed., by Edwin Norris, 2 vols., London, 1855, (many portraits and woodcuts); Stanley, *Palestine*; Movers, *Phönizisches Alterthum*. The *Bible Atlas and Gazetteer*, published by the American Tract Society, New York, furnishes a most carefully compiled digest of Genesiacal nationalities and affiliations. See also the Map given in McClintock and Strong's *Encyclopedia*, art. "Ethnology." See further on the same, in this and in Smith's *Dictionary of the Bible*, the articles "Cush," "Egypt" (Mitzraim), "Ham," etc.

*1 Kings x, 10; Psa. lxxii, 10; Isa. xxi, 13; Ezek. xxvii, 20, 22.

Rehoboth, Calah and Resen were also founded by Nimrod, *i.e.* the Nimrodites. Thus the primitive civilization of Babylonia and Assyria was Hamitic. The first personal kings of this Hamitic dynasty were Urukk and Ilgi.

From the foregoing determinations it appears that the land of Cush was all the country from the "river of Egypt" to the Euphrates and Tigris, and thence along the western shore of the Persian Gulf to the Gulf of Arabia.

MIZRAIM.

MiTsRaiM or Mizraim represents the second people derived from Kham. By universal consent the word signifies either Egypt or the Egyptians. The colonial offshoots of Mizraim were the following:

LUDIM were undoubtedly the progenitors of the Berber tribes of the northwest of Africa. They are sometimes set down as "near Ethiopia"—in the south of Nubia—but linguistic affinities point out Mauritania as much more probable. The Lydians of Asia Minor are regarded as Semites.

ANâMIM or Anamim were perhaps the forerunners of the Numidians, inhabiting the oases of the desert, and represented by the modern Berber tribe of *Enine.*

LHâBIM or Lehabim settled as Libyans on the Mediterranean coast between Egypt and the Syrtis Major. They were the Libyans of classical history, and the LUBIM of other parts of the Bible.*

NaPhTtuKhIM or Naphtuhim settled about lake Mareotis, on the western border of Egypt, represented by the Naphtuhæi of Coptic Christian literature. They spoke a Berber dialect, and were probably the easternmost tribe of the great Gætulian sub-family of Hamites.

* 2 Chron. xii, 3; xvi, 8; Nah. iii, 9; Dan. xx, 43.

PaThRuSIM or Pathrusim are the Pharusii of ancient Barbary settled in Mauritania, a part of modern Morocco. Some, as Canon Rawlinson, regard them as people of Pathros, which is equivalent to the Thebaïd, or upper Egypt.

KaSLuKhIM or Casluhim are represented by the Shillouhs of Barbary, one of the main branches of the great Gætulian sub-family of Hamites. Out of the Casluhim came the PhiLiShTIM or Philistim, who are universally recognized as the historical Philistines, or Berberic Canaanites on the east of the Mediterranean. Out of the same also issued the KaPhTtuRIM or Caphtorim, whose locality has not been satisfactorily ascertained. By some they are supposed to have colonized Crete;* by others they are thought to have planted themselves on the shore of the Mediterranean between Canaan and Egypt.

PHUT.

PhUT or Phut, the third Hamitic colony, is generally admitted to have occupied the Mediterranean coast west of Egypt. By some, this Berber colony is located just west of the Syrtis Major, but precise information is wanting. Canon Rawlinson thinks the Phut dwelt between Egypt and Ethiopia proper, in the region now called Nubia.

CANAAN.

KNâaN or Canaan designates Phœnicians, so-called in classical history, who in early times were spread over the whole of the Holy Land and Phœnicia proper. They became completely semitized before the time of Abraham.

* The isle of KaPhTtOR or Caphtor, Jer. xlvii, 4. From the association of the "Philistines," "Tyre" and "Sidon," this suggestion seems not plausible.

TsIDoN or SIDON represents the Sidonians. Their city, the modern Sèyda, was located on the Mediterranean, in about latitude 33° 34′. Later, when driven out by the Philistines, "they sought refuge on the rocky islet upon which they founded Tyre."

KheTh or HETH indicates the Hittites, whose country was near Hebron.

IBUSI or JEBUSITE implies a man of the city of IBUS or Jebus. Where this city was located is a little uncertain; but it is believed to have been a primitive Hamitic city built on the site of Jerusalem. "And David and all Israel went to Jerusalem, which *is* Jebus, where the Jebusites were [formerly] the inhabitants of the land."*

AMoRI or AMORITE is a tribal designation whose geographical position is not precisely fixed. By some it is placed west and east of the plains of the Jordan; by others, from lake Asphaltites to Mount Hermon. It was at least a Palestinic colony of Canaanites.

GiRGâShI or GIRGASITE was simply the name of another Canaanitish tribe whose precise position remains unknown.

KhiUI or HIVITE denotes a tribe of Canaanites who, in the time of Joshua, were "inhabitants of Gibeon," and entered into a treacherous peace with the general.† The Hivite is represented as dwelling "under Hermon in the land of Mizpeh."‡

AaRKI or ARKITE signifies a man of Arka or Acra, — a city whose ruins still exist between Tripoli in old Phœnicia and Antaradus.

SINI or SINITE denotes a man of Sin, a town near Acra, on the slopes of Mount Lebanon.

* 1 Chron. xi, 4. See also Josh. xviii, 16.
† Josh. xi, 19. ‡ Josh. xi, 3.

ARVâDI or ARVADITE, a man of a town now called Rowèyda, on the little island of Aradus near the Mediterranean coast opposite Cyprus.

TsMâRI or ZEMARITE, a man of Simyra, near Antaradus, on the western spur of Mount Lebanon.

KhaMâThI or HAMATHITE, a man of a city now known as el-Hamah, and situated on the Orontes north of Phœnicia, and in the middle latitude of Cyprus. A very ancient name, known among the cuneatic inscriptions of Assyria, and hieroglyphed among the conquests of Rameses III.

"These are the descendants of KhâM, after their families, after their tongues, in their countries, and in their nations."

It is shown, therefore, on the basis of Biblical interpretation, that the Hamites primitively spread themselves from Mount Lebanon over all the Holy Land as far as Arabia; that they extended from this region eastward to the Tigris, and occupied the eastern border of Arabia as far as the Indian Ocean; and that on the west they possessed the valley of the Nile as far as the first cataract, and spread along the African shore of the Mediterranean as far as the modern Gibraltar. Not only, therefore, was the primitive civilization of Egypt Hamitic, but also that of Barbary, as well as that of Phœnicia, Judea, Syria, Chaldæa, Assyria, Babylonia, Susiana, and Himyaritic (or eastern and part of southern) Arabia.

History, tradition, languages and monuments enable us to follow the migrations and displacements of the Hamites into post-genesiac times, and even to note their existing distribution over the surface of the earth. Hamites passed from Asia Minor into the south of Europe as early as 2500 B.C., and occupied the peninsula of Greece, where they were known as Pelas-

gians* or Tursanes, and some of whom were afterward designated Tyrrhenians. The Pelasgians of Crete were known as Musoï, from Mysia in Asia Minor; those of Macedonia and Thrace were the Teucroï. They held the islands of Andros, Samothrace, Lemnos and Imbrus. They did not bring with them a knowledge of the cereals and the art of agriculture. Nor were these aids to civilization derived from Egypt, since no communication with Egypt could probably have existed until about 1700 B.C.; while the cereals were in the Peloponnesus as early as 2000 B.C.—derived, according to tradition, from the Thracians of the Aryan family.

The Pelasgian empire, founded in Asia Minor, gradually extended itself over all Greece, which, according to Herodotus, was called Pelasgia before it was called Hellas.† Euripides says the inhabitants were styled Pelasgiotes before they were Danaoï. In Europe, as in Asia, the Hamites became the first founders of cities. Athens was Hamitic, and so were Dodona, Argos, Aeolis and Doris, as well as Plakia and Skulaka on the Asiatic shore of Marmora, and Larissa in Ionia.

* The Pelasgians are regarded by Rawlinson as Aryans, and the ancestors of the Hellenes (*Herodotus*, Vol. I, p. 541). This view is apparently opposed by the text of Herodotus and the testimonies generally. The ethnic position of the Pelasgians, nevertheless, is not regarded as completely settled. Pausanias states that they received the arts of agriculture and weaving from the Indo-European Thracians. But the Indo-Europeans had been possessed of these arts before they dispersed from their primitive home in central Asia; and if the Pelasgians had been a branch of that stock they would have carried agriculture and weaving with them into Greece. See Pausanias l. viii, c. 4, § 1, and l. 1, c. 14, § 2, ed. Didot-Dindorf, pp. 19 and 367; Lenormant, *Manuel d'histoire ancienne*, 3d ed., t. I, p. 354; d'Arbois de Jubainville, *Les premiers Habitants de l'Europe*, chap. iv. *Les Turses ou Pélasges-Tursanes.*

† Herodotus, Bk. II, ch. 56.

The Arcadians and primitive Argives were Pelasgic, as well as the primitive Ionians.

From Hellas, the Pelasgians extended their empire into Italy, where, as Tyrrhenians, they invaded the north; as Peucetians, they occupied the southern extremity; and as Œnotrians, the region afterward known as Lucania and Bruttium -- the modern Calabria and Basilicate. As Messapians and Daunians, they settled also in southern Italy. At a later period, when driven from Hellas by Indo-Europeans, they took possession of the whole of Italy, subduing the Aryan Ombro-Latins, who had already expelled the Aryan Siculi (Ligurians), the conquerors of the Pelasgic Œnotrians or primitive immigrants. Here, then, as Etruscans,* these Hamitic Pelasgians established a new empire, which grew strong enough to make two warlike attempts upon Egypt, which, however, proved unsuccessful. The center of the Etruscan empire was between the Tiber, the Mediterranean and the Apennines. Its date is fixed by d'Arbois de Jubainville at 992 to 974 B.C.— the Siculi having fled in 1034 B.C. to Sicania, now Sicily.

The early history of Rome was chiefly under Etruscan influence. This power, during the fifth century B.C., extended itself to the regions north of the Po. Mantua was one of their cities. They left Etruscan inscriptions in the southern valleys of the Alps, which have been discovered in modern times. There they

* Authorities disagree as to the affinities of the Etruscans. Dennis, who has given the subject patient investigation, agrees with Herodotus, that they were a colony from the Lydians of Asia Minor, arriving by sea (*Cities and Cemeteries of Etruria*, new ed., 1879). Rawlinson holds that they belong to a different race from the other Italic nations. Delitzsch says they were Semites. This subject has been historically discussed by d'Arbois de Jubainville, *Les Premiers Habitants de l'Europe*.

came in conflict with the Aryan Celts, by whom they were subjugated at the end of the fourth century B.C. About the same time the Roman power wrested central Italy from the Etruscans. Southern Italy had already been seized by the Ombro-Latin Sammites. Thus disappeared the great Hamitic empire in Italy, and Aryan dominion was planted in its place, as sixteen hundred years earlier it had displaced Hamitic power in the peninsula of Greece.

From the time of the arrival of Hamites in Greece, eight hundred years elapsed before direct intercourse sprang up between Greece and Egypt. On occasion of the expulsion of the long-dominant but foreign "Shepherds" from Egypt — about 1700 B.C. — Danaos is represented as planting a colony at Argos. He was not an Egyptian, but it is not known whether the Shepherds were Hamites or Aryans. Agriculture had been known in Egypt as early as the Twelfth Dynasty, which, according to the German Egyptologists, was between 2850 and 2400 B.C., or, according to English chronologers, about 2080 B.C.

Save the displacement of the primitive Hamites in western Asia and southeastern Europe, their distribution remains at the present day nearly as it existed when the ethno-genealogical table of Genesis was compiled. Hamitic peoples still occupy the whole of the north of Africa as far as the Soudan, and all the eastern coast region of that continent as far as the equator. The ancient Egyptian type is still very well preserved in the Fellâhin, or peasantry of the lower Nile; and still better in the Coptic Christians of the towns. The Berber type is distributed, somewhat mixed with Semites and Europeans, throughout the Barbary States, and includes the modern ethnic designations of Kabyles and Shillouhs. The extinct people of the Canary

Islands were Berbers. The Berber type was differentiated from the Egyptian at an early period; since the hieroglyphic inscriptions of Egypt designate them as *Temhu*, in distinction from the *Retu* or Egyptians; and, on the Egyptian monuments, the *Temhu* are recognizable by tattoo marks in the shape of a cross—a mode of ornamentation which still prevails among the Kabyl women of Algeria. The east African Hamites are represented by the Nubians of the Nile district, who were formerly Christians, and by various half-civilized tribes lying between the Nubian Nile, the Blue Nile and the Sea; and above the mouth of the Blue Nile, on both sides of the White Nile, and thence along the more southern shores of the Red Sea to the strait of Bab-el-Mandeb. Beyond this latitude are the well-known Galla, resembling Negroes in the color of their skin, but free from the Negro odor, and having long curly hair and agreeable features, and praised for the morality and nobility of their character. They appear evidently to be a mixed race, containing Negro and either Hamitic or Arabic blood. The Hamitic type, it appears, blends on all sides with that of the neighboring peoples, so that it is difficult to decide where the Hamite ends and the Negro begins. History informs us that an ancient Egyptian type underwent a similar blending with the African, and explains that this was occasioned by intermarriages with Negroes, at that time known as Ethiopians,—the old biblical sense of Cush having become greatly enlarged. In modern Africa, where the physical characters of tribes become insufficient for the identification of race, the structure of the language and the grade of civilization at once indicate the dominant and primitive element. Throughout most of eastern Africa the superiority of the Hamite character is at once discernible.

Linguistic peculiarities and profound race distinctions mark the products of Hamitic civilization as far surpassing any of the indigenous productions of the black races.

There remains yet one ramification of the Hamites to which I have not directed attention. I have stated that they were traceable through the Berber type as far as the Straits of Gibraltar. They are actually traced to the Canary Islands, where the Guanches once lived. There is good reason to believe, as I shall show hereafter (chapter xxiii), that an extensive island once covered this portion of the Atlantic, and that after remaining the seat of a powerful Mongoloid empire for an unknown period it was seized by the Hamitic Berbers, who had already displaced the Mongoloids from northern Africa. Here a small number remained after geologic agencies had well nigh obliterated the country in which they dwelt. This remnant has been known in historic times as Guanches; but they are now totally extinct.

The existence of Hamitic settlements and intermixtures on the west of the Red Sea extended correspondingly, in classical and modern times, the application of the name Æthiopia.* We have seen that the Genesiacal table extends the land of Cush, the *sunburnt race*, over western Asia, and along the eastern and southern shores of Arabia. It has been a matter of doubt whether, at so early a period, the Cushites crossed into Africa. It appears that, at a later period, they were found existing in Africa; and as the Greeks

* Mr. W. Gifford Palgrave has made the suggestion that the Red Sea has resulted from an irruption of the waters of the Indian Ocean during human times. He states that the geology and topography of Arabia belong to Africa rather than Asia. (Palgrave, in Murray's *Geograph. Distrib. Mam.*, P. II, p. 12.)

called this sun-burnt race Aithiopes (a literal Greek translation of Cushim), geographers have been perplexed by the evidences of both an Asiatic and an African Æthiopia. Distinct relics of Hamitic occupation still remain in southern Arabia, in the names of towns, and in numerous inscriptions written in a language known as Himyaric. Many similar monumental records of the Hamitic age remain in Assyria, and along the southern coast of Asia Minor. Throughout all the Asiatic, Hellenic and Italic regions the primitive Hamitic stock appears to have been absorbed by overlying populations, whose modern dark skins, very probably, perpetuate the remembrance of the admixture.

CHAPTER IV.

THE SEMITES AND THEIR DISPERSION.

PURSUING the same course as with the Hamites, I shall first follow the primitive distribution of the Semites, as given in our ethno-genealogical table.

SheM or Shem, according to Gesenius, signifies a *name*. In its radical letters, which are the essential and original constituents of the written word, it is simply SM, and possibly sustains a relation to the Greek word *sema*, a sign, and the Latin *signum*. "The word is often employed to *signify* the name of Jehovah, and not unlikely it was applied to the son of Noah to *signalize* his selection to be the ancestor of the chosen people."

ELAM.

AILâM or Elam is generally regarded as denoting the Elamites, or inhabitants of Elymais (sometimes Susiana or Kissia), on the eastern side of the Persian Gulf. In classical history the Elamites are generally associated with the (Japhetic) Persians, and Josephus says they were the founders of the Persians. But there is good reason to rely upon the authority of a table of ethnic affiliations which, so far, is wonderfully vindicated by all our discoveries. We must, therefore, conclude that Elam was settled primitively by Semites, whom a Japhetic tribe displaced at a later period, as the Semites themselves displaced and absorbed so many Hamitic nations.

ASSHUR.

ASshUR or Asshur is an eponym for Assyria or Assyrians. Nimrod, the Hamite, we are told, went out of Babel to Asshur, and built Nineveh and other cities. A Hamite went into a Semitic country and built cities, which we have regarded as Hamitic. Did the Hamite simply place himself at the head of Semitic colonies, or did he lead off Hamitic colonies, which he planted among Semitic peoples?* The force of the original text seems to imply the latter alternative, and it also seems plausible. Later, however, the Hamitic element in these Assyrian cities was absorbed by preponderating Semites, and they became in a strict sense the abode of Asshur, who was venerated in later times as the guardian deity of the Assyrians.

ARPHAXAD.

ARPhaKShaD or Arphaxad, as the Septuagint transliterates the name, stands for the north Assyrians. It signifies, etymologically, *the boundary of the Chaldæans.* A thousand years later Ur was within the bounds of Arphaxad.

ShâLaKh or Salah, as transcribed in our version, probably denotes the *Salachians*, inhabitants of the Salachia of Ptolemy, in ancient Susiana, at the head of the Persian Gulf.

AeBeR, Eber or Heber, the son or colony from Salah, denotes, etymologically, *those on the other side*, or *those from the other side.* It may allude to the arrival of the Abrahamidæ from the east of the Eu-

* The difficulty here arising has led some to regard the parenthesis describing Nimrod as the founder of Babel, Erech, Accad and Calneh, as a later interpolation. (A. Knöbel, *Die Völkertafel der Genesis*, Giessen, 1850, p. 339.)

phrates, or, on the theory of the Chaldæan origin of this ethnic table, it may signify *those gone to the west side of the Euphrates.* In either case it seems a designation applied *after* the event, when the Eber had settled in Canaan and acquired the name of Hebrews, since by common consent the *primitive* Eber were located on the *east* of the Euphrates in Chaldæa.

IâKTâN or Joktan, one of the sons of Heber, or one of the affiliations colonized from the Heberites, designates the Joktanides, or primitive stock of northern and western Arabs.

ALMODâD or Almodad, the first issue from Joktan, represents, by general consent, the Almodœei of Ptolemy, a people of central Arabia Felix.

ShâLePh or Sheleph, second issue from Joktan, are the Salapeni of Ptolemy, now probably identified with Metèyr, in the neighborhood of Mecca.

KhaTsaRMâUTt or Hazarmaveth, third issue from Joktan, are the Chathramitæ of Ptolemy, now at *Hadramaut*, a modern province in the south of Arabia Felix, between Yemen and the Mahra country. The people were known to the ancients as Atramitæ.

IâRaKh or Jerah, fourth issue from Joktan, is easily identifiable with a modern tribe designated *Yareb, son of Joktan*, on the Arabian Gulf border of Arabia Felix. Forster attributes to them a wide territory, stretching from the Persian Gulf to the Straits of Bab-el-Mandeb.

HaDORâM or Hadoram, fifth issue from Joktan, are located by some at the mouth of the Persian Gulf in Arabia; but by others, on the southern shore of Arabia Felix, west of *Jerah.*

UTsâL or Uzal, sixth issue from Joktan, corresponds to modern *Sanaa*, the capital of the province of *Yemen*, once a flourishing town and the rival of Damascus.

DiKLâH or Diklah, seventh issue from Joktan, is represented by the *Dulkhelitæ* of Himyar, and the tribe known as *Dhu'l-kalaah* in Yemen.

AOBâL or Obal, eighth issue from Joktan, denotes a tribe colonized in western Arabia, north of Mecca. In the opinion of some, this tribe spread from the Arabian to the African shore of the Straits of Bab-el-Mandeb.

ABIMâeL or Abimael, ninth issue from Joktan, answers to the *Mali* of Theophrastus, the *Malichæ* of Ptolemy, and the name is perpetuated in the town of *Malai* near Medina.

ShBÂ, Sh'BÂ or Sheba, tenth issue from Joktan, may refer to the reminiscences of *Sheba* still preserved in local names in the southwest of Arabia. This name is but slightly distinguished from the Hamitic SBÂ or S'BÀ. Rawlinson, assuming it identical, thinks it signifies the mixed character of the race. It certainly is not improbable that Semites became here superimposed on Hamites at a date earlier than the formation of this ethnological table.

OPhiR or Ophir, eleventh issue from Joktan, is placed by some in the southwest corner of Arabia; by others, at *Ofor*, a town and district of Oman.

KhaUILâH or Havilah, twelfth issue from Joktan, is perhaps not distinguishable from the Hamitic Havilah; but good authorities decide to locate the Semites at *Chaulan* or *Khawlan*, in Arabia Felix, on the Red Sea.

IOBâB or Jobab, last issue from Joktan, is believed to be represented by the *Iobaritæ* of Ptolemy, and the modern *Beni-Jobub* in ancient Katabania, midway between *Sanaa* and *Zebid* in Arabia.

PheLeG, PhaLaG or Peleg, the other son or colony from Heber, is believed by Lenormant to have

located in upper Mesopotamia. The posterity of Peleg to the fifth "generation" or colonial differentiation, is given in the eleventh chapter. The absence of such enumeration here has been taken as evidence that the table was compiled in the early lifetime of Peleg — perhaps by Peleg himself. But the compilation was late enough to permit the enumeration of thirteen colonies proceeding from Joktan, Peleg's brother. Does the termination of the Jewish and Ishmaëlitish lineage with Peleg indicate that the author of the compilation dwelt where he became better informed respecting the tribes of Arabia than respecting those colonized in upper Mesopotamia? If we reply affirmatively, we are pointed again to Chaldæa as the place of origin of our ethnographical table.

LUD.

LUD, name of the fourth son of Shem, is by some regarded as the eponym of the Lydians, located in the western part of Asia Minor, on the Ægean. At a remoter period, however, according to Rawlinson, this region had been occupied by a dynasty of Pelasgians, and he is accordingly of the opinion that the Lud were primitively located north of Palestine, in the close neighborhood of the Assyrians.

ARAM.

ARâM or Aram, called the fifth son of Shem, is generally understood to designate tribes stretching from northern Arabia through Syria and central Mesopotamia to Armenia — a name which still perpetuates this patronymic — and thence to the borders of Lydia. Aramaïa was a name of Phrygia, in central Asia Minor, in the time of Homer; and Josephus tells us the Syrians called themselves Aramæans. These people

extended as far southwest as Damascus; for we are told "the ARâM of Damascus came to succor Hadadezer," and "David slew of ARâM two and twenty thousand."* The Nestorians belong to this affiliation.

aUTs or Uz, the first issue from Aram, is supposed to have located on the Arabian frontier of Chaldæa; Rawlinson says nearly in the middle of north Arabia, not very far from the famous district of Nejd. This was the land of Job.

KhUL or Hul was perhaps near lake *Huleh*, north of Palestine; but the determination is uncertain.

GeTteR or Gether, the third issue from the Aramæan stock, has not been certainly located. By some it is placed in the east of Armenia; others think it one of the cities of Dekapolis, east of the Jordan. Lange says "Arabians."

MaSh or Mash is put down in 1 Chronicles i, 17 as MeSheK (Meshech in our version), a word of different radicals, and also given (Genesis x, 2) as the name of a son of Japhet. This confusion creates uncertainty; but *Mash* was probably located near the other Aramæans; and as the name seems to be perpetuated in Mt. *Masius*, and in the river *Masca*, it appears reasonable to place this Aramæan tribe in the north of Mesopotamia or Assyria.

From the foregoing examination it appears that the primitive Semites were centrally located throughout Syria and central and northern Mesopotamia, and stretched southward along the entire west coast of Arabia. There were Hamites on all sides of them except the northeast — on the extreme south and east of Arabia, and along the lower plain of the Euphrates; on

*2 Sam. viii, 5. See also verse 6, where ARaM stands for a locality and ARâM for the people. ARâM (Aramæans) is rendered Syrians in our version.

the west, in Egypt, and perhaps along the western shore of the Red Sea, and also along the eastern coast of the Mediterranean, through Canaan and Phœnicia; and on the northwest, throughout all the southern plain of Asia Minor, and perhaps, also, the Tauric highlands. At a very early period, generally put down as about the eighteenth century B.C., the Semites had absorbed the Hamitic populations of Assyria, Mesopotamia, Syria and Phœnicia. In the time of Herodotus the following nations had become semitized: the Assyrians, Babylonians, Syrians or Aramæans, Phœnicians with their colonies, Canaanites, Jews, Cyprians, Cilicians, Solymi and northern Arabians. The Solymi were in Asia Minor; and if these became semitized very likely the neighboring nations underwent the same change. The semitization of these nations is not to be viewed as a displacement of the primitive population. Much evidence exists of close ethnic affinity between the Hamites and Semites at this early period. This is shown in the blending of Hamitic and Semitic roots in some of the most ancient inscriptions; in the facility of intercourse between the Semites of Asia and the Hamites of Egypt; in the peaceful and unobserved absorption of all the Asiatic Hamites, and the Semitic adoption of the Hamitic gods and religious system. It is manifest that, at an epoch not long previous, the two families had dwelt together and spoken one language. Of this language, called Accadian or Sumeric, some relics remain. It supplied the oldest form of the cuneiform character; and from it the Assyrio-Babylonian cuneiform was derived.

The northern branch of Semites have continued, in later times, to occupy nearly the same regions as they acquired eighteen centuries before Christ. The southern Semites spread over the peninsula of Arabia, en-

croaching upon the borders primitively settled by Hamites, and overflowing across the Red Sea into the eastern border of northern Africa. The Joktanide Arabs were subsequently encroached upon in northern Arabia by the Ishmaëlites. At the present time, some of the Hamitic tribes of Nubia have become largely semitized, and claim for themselves a Semitic origin.

The Semites have always been confined within narrow geographical limits. In the time of Herodotus, "a parallelogram sixteen hundred miles long, from the parallel of Aleppo to the south of Arabia, and, on an average, eight hundred miles broad," inclosed nearly the whole of this family. "Within this tract — less than a thirteenth part of the Asiatic continent — the entire Semitic family was then, and, with one exception, has ever since been confined."* The exception is the Arab conquest in the seventh century.

* Rawlinson, *Herodotus*, Vol. I, p. 538.

CHAPTER V.

THE JAPHETITES AND THEIR DISPERSION.

IâPheTt or Japheth, the name of the second son of Noah, is said by Gesenius to signify etymologically "*widely-spreading*, from the root PhâTtâH." It seems likely the name was bestowed *after* the wide dispersion of his posterity; unless the language of Noah promising that "God shall enlarge Japheth"* can be understood as prophetic of the wide dispersion and power of his descendants. The Greeks retained a mythical recollection of their remote progenitor, under the name of *Iapetus*. He was one of the Titans, and the fabled son of heaven and earth. The Greek recognition of their Iapetic derivation indicates at once the direction in which we are to search for the posterity of IâPheTt. By these Iapetic Javanites "were the isles of the Gentiles divided in their hands."

GOMER.

GoMeR or Gomer is a name† whose root-forms are preserved very extensively in the designations of European tribes. They are handed down by Homer, Diodorus, Herodotus, Josephus and Ptolemy. *Gimiri* are mentioned in cuneiform records of the time of Darius Hystaspes.‡ The tribes of Gomer are the Go-

* Gen. ix, 27. This view is dilated upon by McCausland, in *The Builders of Babel*, ch. iv.

† Neither this nor the other Japhetic names possesses a proper Semitic root. These names are Indo-Germanic Hebraized.

‡ Rawlinson, *Herodotus*, Vol. III, p. 150; note, p. 152.

merians, Kimmerians or Crimeans, dwelling about the northern shores of the Black Sea, and, in later times, spreading as Kymr, Kymri, Gaels, Gauls or Kelts over a large part of central and western Europe. Their name is recognized from Great Britain to Spain in such words as *Cambria* and *Cumberland* in Great Britain, *Cambrai* in France, *Cambrilla* in Spain, and perhaps *Coimbra* in Portugal.

ASHKNAZ or ASHKENAZ denotes, undoubtedly, the Ascanians, an ancient name of the Phrygians, who dwelt south of the Black Sea. The root of the word is extremely frequent in ancient history, throughout the Bythinian region. The son of Æneas was named Ascanius; and the Trojans themselves, whose city fell in the gray dawn of history, were probably the children of Ashkenaz. The Euxine, Pliny tells us, was formerly styled *Axenus*, and this, in Greek, becomes the well known *Euxeinos*.

RIPAT or RIPHATH denotes apparently the *Riphaces* of Josephus, whose country was Paphlagonia, in the middle of the south shore of the Euxine. Some have located this tribe in Armenia, and some, on the north shore of the Euxine, without sufficient reason. Knobel adds the Kelts, and Lange adopts the opinion.

TOGARMÂH or TOGARMAH is almost universally regarded as denoting Armenia, in which dwell to this time the remnants of a primitive people who style themselves "the house of Thorgon."

MAGOG.

MÂGOG or MAGOG is a name about which much learned discussion has arisen. This people has been sometimes located east and northeast of the Euxine, and set down as the ancestors of the Scythians. But as Dubois has determined, they are rather *Cauc-asians*

and *Circassians* (*Tcherkesses*) in the mountainous region between the Euxine and the Caspian. F. Lenormant has a fancy that the Turanians are descended from Magog; while the Chinese are an antediluvian race.*

MâDaI or Madai, by universal consent, designates the Medes, whose seat was east of Assyria and south of the Caspian. History and archæology prove, however, that at an earlier date the people of Medea were not Japhetic. The Medean dynasty of Babylon is regarded by Rawlinson as Turanian;† but Rawlinson, following Oppert and Max Müller, merges Hamitic and Turanian indications together. Trusting to the faith of the Genesiacal record, we must hold that Japhetites were the first children of Noah who dwelt in Media. But it is easy to admit the probability that they displaced an older people, and that these older people were Turanian in the sense of being Ural-Altaic. But this touches a discussion for which I wish now only to lay the foundations.

JAVAN.

IâVâN or Javan — in the Septuagint, *Iovan* — is undoubtedly equivalent to the Homeric *Iaones*, denoting the primitive *Ionians* — a name which then signified all the tribes which afterward became Hellenes. The same, in its root-elements, is traced in inscriptions as far back as the Eighteenth Egyptian Dynasty. On the *Rosetta Stone*, the Demotic IUNiN is the equivalent of the Greek *Hellēnikois*. *Javanas* is the Hindoo designation of the Greeks in the "Laws of Menu"; and among the Arabs, ancient and modern, *Yunân* is the generic name of all the Greeks. The Javanidæ

* Lenormant, *Ancient History of the East*, Am. ed., Vol. I, p. 62.
† Rawlinson, *Herodotus*, Vol. I, pp. 319, 352, 539.

were therefore understood to spread over all the region of the Hellenic race, including the eastern shore of the Ægean, in Asia Minor.

AeLIShâH or Elishah finds its equivalent in *Elisa* or *Elis*, on the coast of the Peloponnesus. *Hellas* is probably from the same root. Hence the geographical position indicated is the shores of the Morea, and the islands contiguous, in the Archipelago.

TaRShISh or Tarshish is by one school thought to denote *Tartessus* on the Spanish coast, and by another, *Tarsus*, on the Cilician coast, in Asia Minor. The latter locality seems to carry the weight of evidence, since there is almost a complete identity between TaRSIS (aspirates omitted) and *Tarsos*, and the other Ionic tribes are ranged by our ethnic table along the same Mediterranean coast.

KiTtIM or Kittim has been referred by different authorities to Italy, Macedonia and Cyprus. We find Tarshish, Phul (Pamphylia), Lud (Lydia), Tubal (Paphlagonia), Javan (Ionia) and Kittim so often grouped together that we are constrained to reject Italy, and probably Macedonia, from consideration. Kittim was contiguous to Tarsus and Paphlagonia; and the island Cyprus fulfills the condition. Egyptian inscriptions, moreover, sustain this solution.

DoDâNIM or Dodanim, recorded as RODâNIM* in 1 Chronicles i, 7, is generally understood to refer to the *Dodoneans* of Macedonia. Adopting Rodanim as the correct name of this tribe, it may easily refer to the island Rhodes. This view would happily coördinate this colony with the other affiliations of Javan.

* Our English version says *Dodanim*, with a marginal reference to Gen. x, 2, etc.

TUBAL.

TuBâL or TUBAL is a name perpetuated in the *Tibareni* of Herodotus and Strabo, a designation of the people now known as Georgians. Josephus says that *Tubal* represented the Iberians in his day, and Bochart and Dubois remind us that *Thobel* and *Tubal* are identical with Georgians, the ancient Iberians of the southeast coast of the Euxine, and extending thence into northern Armenia south of the Caucasus.

MESHECH.

MeShek or MESHECH denotes a tribe contiguous to *Tubal*, as indicated by Ezekiel, and by Herodotus, who says: "Moschi and Tibareni." All authority, accordingly, locates the Moschi or Meschi on the Moschian range adjacent to Tubal (Iberia) in the extreme north of Armenia, along the slopes of the Caucasus. The Moschi are set down by Rawlinson as ancestors of the Muscovites, but the evidence is not apparent.

TIRAS.

TiRâS or TIRAS, the seventh colonial issue from Japhet, is commonly understood as denoting the Thracians, whose geographical position was southwest of the Euxine. The river *Tiras* of Ptolemy, now known as the Dniester, flows into the Euxine from the northwest. The Thracians perhaps stretched northward far enough to join the widely-extended Kimmerians.

The genesiacal table thus gives the Japhetites a location entirely north of the Semites. In Medea they stretch around the northeastern border of Semitic territory. From Armenia, their central region, the Japhetic country extends westward around both shores of the Black Sea, and southward along the western border of Asia Minor. They crossed the Bosphorus and

populated all the Hellenic shores and islands of the Ægean.

From non-biblical sources we obtain further information respecting the early dispersion of the Japhetites or Indo-Europeans — called also Aryans. All determinations confirm the biblical account of their primitive residence in the same country with the Hamites and Semites. Rawlinson informs us that even Aryan roots are mingled with presemitic in some of the oldest inscriptions of Assyria. The precise region where these three families dwelt in a common home has not been pointed out. We discover, in the remotest antiquity, movements of Aryan peoples in three different directions. One stream is seen setting northward across the Caucasus, through the gorge of Dariel, and thence westward along the north shore of the Euxine. Another stream sets westward from the Armenian region, along the south shore of the Euxine, across the Bosphorus and the Archipelago, into southeastern Europe. The third stream sets eastward, and then southeastward, across the Hindu-Kush, into the valley of the Seven Rivers, the modern Punjâb. The center of divergence of these three streams is Armenia, or at least some region between Armenia and Turkestan or Bactria. This fact lends confirmation to the biblical statements; though it is not fully established that the so-called Ararat of Armenia is the biblical Ararat, which, there is reason to suppose, was located farther east.

The southeastern or Asiatic division of Aryans separated into two sub-families, the Brahmanic and the Iranic. It was perhaps before the separation that the Hymns of the Vedas were written. Such is the opinion of Max Müller, who maintains that the Zoroastrian religion marked a schism in the primitive Vedic. Be

that as it may, the adherents of the Vedic worship traversed the passes of the Hindu-Kush and sojourned in the Punjâb. Here the Brahmanic form of their religion underwent its development and decline. In the course of time the Brahmanic peoples dispersed themselves over nearly all portions of the Indian peninsula, displacing the indigenous population either by extermination, by absorption, or by driving them to the hills.* The Brahmanic language was Sanscrit. This is now a dead language, like that of the sacred books of so many other nations; but it is represented in modern Hindustan by the Bengalee, Nepalee, the pure Hindu and the Urdu. The mysterious Gipsies are an erratic tribe of Hindus, who left India after 1000 A.D., and are known to have wandered as far as Crete in 1322, were in Corfu in 1346, and in Wallachia in 1370.

The Iranic sub-family of Asiatic Aryans spoke the Zend, which is the language of the Avesta, the sacred writing of the Persians, and of the most ancient cuneiform inscriptions of Persia. From the Zend proceeded the Pehlevi, and from that the modern Persian. To this sub-family belong the Beluchs, the Afghans, the Tadshik of Turkestan, and the agricultural populations of Ozbeg, Khiva, Bokkara, Kokand and Kashgaria.

The westward or Mediterranean stream of European Aryans appeared in southeastern Europe about 2000 B.C. They brought with them a knowledge of the cereals wheat, rye and barley, together with the plough, and the metals gold, silver and bronze. Knowledge of these sources of civilization they imparted to the Pelasgic Hamites who had preceded them. The first group of southern Aryans appeared on the Adriatic as Istri-

*See Major-General John Briggs' *Report on the Aboriginal Tribes of India*, in Reports of the British Association, 1850.

ans; and, as Venetes, they founded the city of Venice (Venetia). They also held a large part of the Archipelago. As Phrygians they had gained possession of the greater part of Asia Minor. The Ligurians (including Siculi) dispossessed the European Iberians of most of western Europe at about the same date; and in the time of Hesiod (850 B.C.) they held Gaul. In the sixth century B.C. they also held possession of Spain for eighty years. The Ombro-Latins wrested most of Italy from the Javanic Ligurians; but were, in turn, subjugated by Pelasgians bearing the name of Etruscans. Subsequently the Aryan nations regained possession, and, as Romans, overshadowing and absorbing their Hamitic neighbors, erected a kingdom destined to extend its authority over most of the known world.

The earliest group of the northern stream falling under the cognizance of history may be styled Thracian — from Tiras, an affiliation of Japhet. It was composed of the ancestors of the Hellenes, Italians and Kelts. The Hellenic Achæans were in the Peloponnesus in the fourteenth century B.C., according to Egyptian monuments. They came into Greece by following the eastern coast of the Adriatic southward. Hence they must probably be considered an offshoot of the Thracian group.* Continuing eastward, they occupied the Ionian Islands. Later they appeared in Thessaly, and in the eleventh century B.C. they had

*It does not satisfactorily appear whether *first* Aryan settlers entered Greece from the north or from the east. As the Genesiacal table speaks of them as settled in Ionia, upon the east shore of the Ægean, and upon the "isles of the Gentiles," and as their kindred were scattered eastward through Asia Minor to Armenia, it seems likely that the Thracian colonization of Greece from the north or northeast was not the *first* Ayran colony. Under this view, there would have been three colonizations of Greece by Aryans: 1st, from the Ionian coast; 2d, from Thrace; 3d, from the northern Adriatic.

returned to Asia, and established settlements upon the coast of Asia Minor.

Another branch of the northern stream of European Aryans is known in Europe as Kimmerians or Kymri, about 650–600 B.C. They were pressed westward from the Tanais (Don) by the Scythians, famous in all history for a fierce and warlike disposition. Moving westward, they spread over regions known in classical history as Gaul. Their generic designation in central and western Europe was Gauls or Kelts. A nation retaining the name of Kymri or Kimbri occupied the Spanish peninsula. The Belgæ and the British Kelts were of the same stock. The Kelts had spread over western Europe as early as 450–430 B.C. They occupied the whole region between the Alps and the Baltic Sea and German Ocean. The Goths and Teutons now pressed upon them from the east, and drove them from the countries between the Danube and the Baltic. The Iberians resisted them in the Spanish peninsula, and drove them back into Gaul. This country was already packed with Keltic tribes, and the refugees sought a permanent asylum south of the Alps, in the plain of the Po. From this region one branch extended its conquests over middle and lower Italy, perhaps even reaching Sicily; the other recrossed the Austrian Alps, and occupied the vast plain known as Hungary. About 280 B.C. they made encroachments on Macedonia and Greece, but were repulsed; whence, crossing the Dardanelles, they ravaged Asia Minor for many years, where they have left their name to a district known as Galatia. During the same period they made extensive conquests from the Scythians. But now the Sarmatian immigration from the east had commenced in the regions north of the Black Sea, and the Kelts fell back along the valley of

the Danube, leaving traces of their presence in the names *Wallachia* and *Gallicia*, but slowly disappearing through absorption into more powerful nations.

Another branch of the northern stream, first recognized in Europe as subjects of the Scythians, as early as 400 B.C. dispersed themselves over Russia as Letto-Slavs. The Prussians are Lithuanian Letts; the Russians are Slavs, and so are the inhabitants of the southeast of Austria, and the northeastern shores of the Adriatic. Another branch of the northern stream has trifurcated into Goths, Scandinavians and Teutons. The Goths have been absorbed. The Scandinavians have pushed on to the Swedish peninsula, and even to Iceland and Greenland. The Teutons, differentiated first as Bastarnians about 182 B.C., are represented by people speaking various dialects, of which the High German is most important on the continent, and the composite Anglo-Saxon the most important in Great Britain and the colonies and nations which have sprung from her people.

Still another branch of the northern stream of Aryans swept across the European border about 1500 B.C. Under the name of Scythians they seized the country bordering on the Dnieper, expelling the Kelts, as already stated, who now proceeded on their conquest of Europe.* During the entire period of classical history they are known as fierce and warlike tribes, occupying a vast country of plains and prairies north

*Ethnographers are not unanimous in respect to the ethnic position of the Scythians. Boekh, Niebuhr and many others set them down as Tatars. But Humboldt, Grimm, Donaldson and others maintain, both on physical and philological grounds, their ethnic affinity with the Aryans. Rawlinson, in his essay "On the Ethnic Affinities of the Nations of Western Asia" (*Herodotus*, Vol. I, p. 523, etc.) distinctly ranges the Scythians among Tatar nations. He even

of the Euxine, but of indefinite extent. In the tenth century B.C. they had reached the Danube. In the fifth and fourth centuries B.C. they had extended as far west as the eastern Alps. In the time of Pliny their western border had receded, and their southern had correspondingly shrunken back. The Scythic nation was now but vaguely known; and soon afterward the Scythians disappear from history, crushed and absorbed, probably, by the pressure of the Thracian Getæ on the west, and the Scythic Sarmatians on the east; or, perhaps, finally exterminated by the subsequent invasions of the Mongol hordes.

To summarize, chronologically, the movements of the Aryan family in Europe, according to the best information, we may recognize:

1. The Ionian or Javanic branch, known to be in Ionia and the "isles of the Gentiles" at the date of the compilation of the Genesiacal table, probably before Moses, and, as some think, in the time of Abraham, say 2100 B.C. They must have belonged to the *western* stream of Aryans.

2. The Kimmerian branch, known on the same authority to have been on the north of the Black Sea about the same date, say 2100 B.C. *Northern* stream.

3. The Thracian branch, which was only a movement of the western Kimmerians; in Attica 2000 B.C.; in the Italian peninsula, said to have passed into the

maintains that a Tatar element is manifest in the oldest records of the Armenians, Cappadocians, Susianians and Chaldæans of Babylon. In a later essay, "On the Ethnography of the European Scyths" (*Herodotus*, Vol. III, p. 158), he argues as distinctly that this nation was Indo-European. F. Müller is of the opinion that some of the Scyths were Ural-Altaic and others Aryan (*Novara-Expedition, Ethnographie*, p. 145).

islands of the Archipelago, and Phrygia, in Asia Minor; but I prefer to regard these tribes as belonging to the anterior Javanic branch.

4. The Ligurian branch, which appeared in Italy about 2000 B.C. Probably an extension of the Javanic, along the shores and islands of the Mediterranean.

5. The Scythian branch, known in the region north of the Black Sea as early as 1500 B.C.

6. The Ombro-Latin branch, which displaced, in Italy, the Ligurian, and was itself displaced by the Pelasgic Etruscans.

7. The Achæan branch, probably appertaining to the Thracians, entering the Peloponnesus in the fourteenth century B.C., coming from the west.

8. The Keltic branch, appearing in the north of Italy 650 B.C., after repulses from the Iberians and Belgians. Probably a nation allied to the Thracians and Scythians.

9. The Letto-Slavic branch, 400 B.C. Perhaps another group from the prolific Thracian stock.

The facts here set forth are supplied by the very latest ethnological researches. It is of interest to us to note that Europe has been completely overspread by the Aryan family, and that the Hindus were originally members of the same race, and of the same family of that race, as ourselves. They are possessed, then, of similar intellectual and moral characteristics. If we style them "heathen," we must remember that they are wise and thoughtful heathen, armed with science and philosophy far above our contempt.

As to the movements of the Aryan family since the Christian era, history is able to speak with a certain sound. No fragment of the family has escaped observation. It would not be possible to conceal itself in the remotest quarters of the world. The color of

its skin would betray it. The tint and texture of its hair would reveal it. The very speech of the rudest peasant would proclaim it. The clang and tone of the Greek and the Sanscrit are in the speech of the most ignorant Swabian and the most servile Slav.

NOTE.—The annexed "Chart of Dispersions of the Noachites" illustrates the subject discussed in the three preceding chapters. The Hamites are denoted by Roman block letters, thus: CUSH, Nimrod. The Semites are denoted by Italic block letters, thus: *ASSHUR, Almodad.* The Japhetites are denoted by common Roman letters, thus: GOMER, Ashkenaz. The names of the grandsons of Noah are indicated, in each case, by the larger-sized letters.

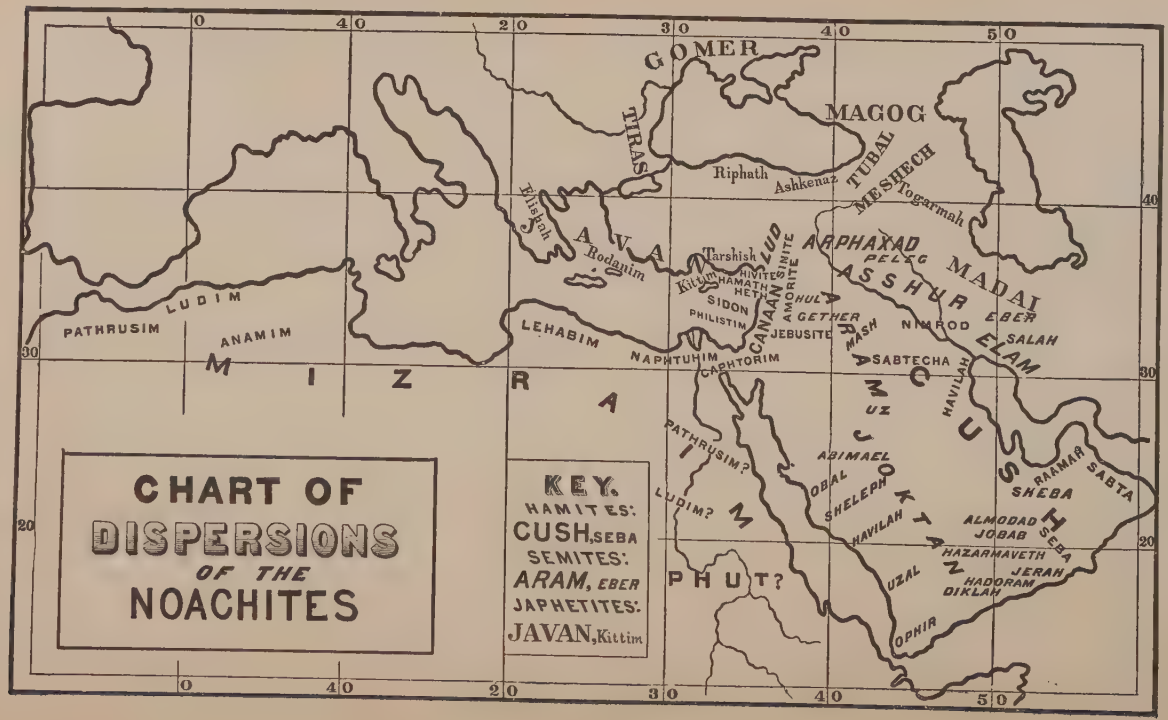
CHART OF
DISPERSIONS
OF THE
NOACHITES
KEY.
HAMITES:
CUSH, SEBA
SEMITES:
ARAM, EBER
JAPHETITES:
JAVAN, Kittim
GOMER
MAGOG
TUBAL
MESHECH
TIRAS
Riphath
Ashkenaz
Togarmah
ELISHAH
JAVA
Tarshish
Rodanim
ARPHAXAD
PELEG
MADAI
ASSHUR
ELAM
EBER
SALAH
NIMROD
LUD
LUDIM
PATHRUSIM
ANAMIM
LEHABIM
NAPHTUHIM
CAPHTORIM
SABTECHA
MIZRAIM
CANAAN
HAMATH
SIDON
PHILISTIM
JEBUSITE
AMORITE
HAVILAH
CUSH
RAAMAH
SABTA
SHEBA
ABIMAEL
OBAL
SHELEPH
HAVILAH
ALMODAD
JOBAB
SEBA
HAZARMAVETH
JERAH
HADORAM
UZAL
DIKLAH
OPHIR
PHUT?
JOKTAN
ARAM
UZ
MASH
GETHER
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40
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30
40
50
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30
40

CHAPTER VI.

PRINCIPAL TYPES OF MANKIND.*

BEFORE basing any deductions on the foregoing account of the dispersion of the Noachidæ, it is desirable to have before us a conspectus of the principal types of mankind at large. I shall group the races in three divisions, according to prevailing color. Ethnologists rely on color to only a limited extent, and, at most, account it but one among many physical and linguistic considerations regarded as throwing light on racial distinctions and affiliations; yet color shows a strange and persistent independence of the physical environment. A chromatic classification, moreover, will be most convenient for the present purpose.† For a more detailed classification see chapter xix.

CONSPECTUS OF TYPES.

I. White Race (Mediterranean) or the Blushing‡ race.
   (1) Blonde Family (Japhetites, Aryans or Indo-Europeans).
   (2) Brunette Family (Semites).
   (3) Sun-burnt Family (Hamites).

* More exact data concerning the black races will be given in chapter xi.

† M. Quatrefages regards the human species as a single stem with three trunks — the *White*, the *Yellow* and the *Black* — which are divided into "branches," "boughs," "families" and "groups." Dr. Charles Pickering (*The Races of Men and their Geographical Distribution*, Boston, 1848) groups the eleven recognized races as "White," "Brown," "Blackish-Brown" and "Black."

‡ So named by Lanci (*il rossicante*) — *Paralipomeni all' Illustrazioni della Sagra Scrittura*, Paris, 4to, 2 vols., 1845.

II. Brown Races.
1. Mongoloid Race (Tatar, Turanian).
   (1) Malay Family.
   (2) Malayo-Chinese Family.
   (3) Chinese Family.
   (4) Japanese Family (including Coreans).
   (5) Altaic Family.
   (6) Behring's Family.
   (7) American Family.
2. Dravidian Race.
   (1) Dekkanese Family.
   (2) Cingalese Family.
   (3) Munda Family (Jungle Tribes or Primitive Dravida).

III. Black Races.
1. Negro Race (Sooty).
   (1) Bantu Family.
   (2) Soudan Family.
2. Hottentot Race (Leather Brown).
   (1) Koi-Koin Family.
   (2) Bushman Family.
3. Papuan Race (Dark-Rusty—*F. Müller*).
   (1) Asiatic Family.
   (2) Australian Family.
4. Australian Race (Coffee-Brown).

The three families of the White or Mediterranean race have, from time immemorial, been distinguished by their color. The Japhetites or Indo-Europeans constitute the *blonde* family. Typically, they possess brown, yellowish or reddish hair, blue eyes and a fair skin. The type is found in its greatest purity among the northern nations of Europe. The Aryans of the south have acquired darker complexions by intermixture with Semites, and, in ancient times, with

Hamites. The Semites are characteristically *brunette*. The ancient Egyptians styled them "yellow"; but this is a better designation of some of the Mongoloid families. The birth-right Jews, in all countries, and the Arabs, are the best examples of this family. The Hamites have always been known by a darker and ruddier tint. Sometimes, as in the Galla of Africa and some of the Nilotic nations, the color is almost black; but it is never associated with the woolly hair, scant beard, prominent jaws or highly intumescent lips of the Negroes. The Hamite complexion, moreover, generally presents a reddish tinge, which renders highly appropriate the designation "sun-burnt," which has been very extensively applied to the family — KhâM, in Hebrew, signifying sun-burnt, and this family being designated among the ancient Egyptians as "red."

The brown races may be reduced to two. The Dravida or Dravidians* are the aboriginal inhabitants of India. "Their skin is generally very dark, frequently quite black. In this point they resemble Negroes, although they are without the repulsive odor of the latter. Their most noticeable feature is their long black hair, which is neither tufted nor straight, but crimped or curly. This clearly distinguishes them from the Mongoloid nations, as does the fact that the hair of their beard and bodies grows profusely. . . . The intumescent lips occasionally recall the Negroes; but the jaws are never prominent."† The race of Dravida consists of the Dravida proper and the Munda or Jungle tribes of the Ganges. The Dravida proper

* For portraits of this race see Frontispiece and Figs. 1 and 57.

† Peschel, *The Races of Man*, Am. ed., p. 451; H. von Schlagintweit, *Indien und Hoch-Asien*, Vol. I, p. 546. In this chapter I shall draw freely from the convenient summaries of Peschel, Müller and Topinard.

embrace the Brahui of Beloochistan, though the Beluchs themselves are Iranians; and besides these, tribes speaking five different civilized languages in the southern part of the peninsula. The Tula or Tulava is

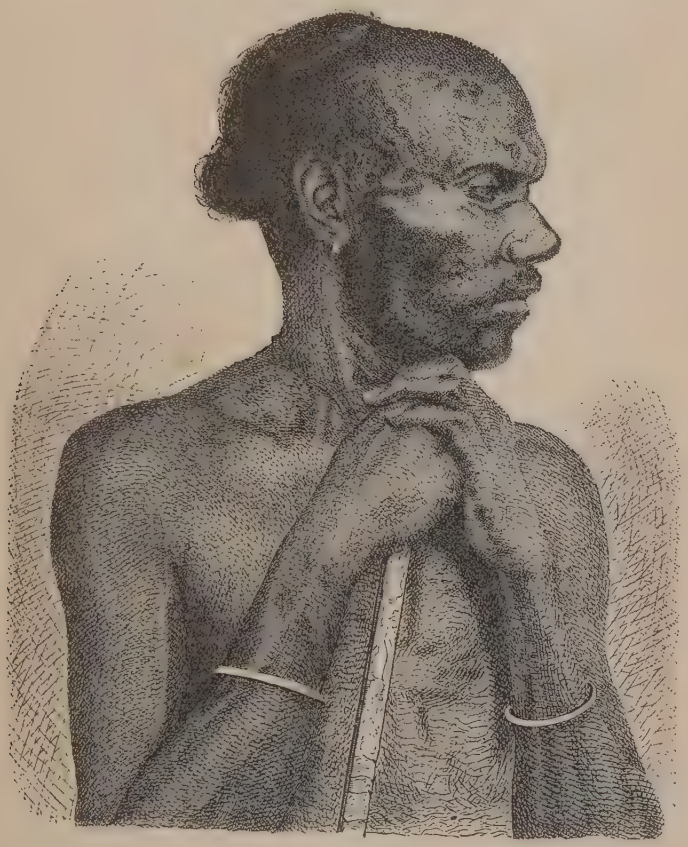


FIG. 1.—A Tamulian Dravidian. The Tribe of Bhuiya of Keonjhar serve as laborers and menials in Bihar and western Bengal; but in the southern tributary estates of Bengal they are lords of the soil. (From Dalton's *Descriptive Ethnography of Bengal.*)

spoken by one hundred and fifty thousand people on the west coast in the neighborhood of Mangalore. The Malayalam or Malabar is the language of a tribe stretching from the last southward to Cape Comorin. Most of the central and west part of the peninsula south of Madras is occupied by the Tamils, who speak the Tamil language. To them belongs also the northern half of Ceylon. The Tamil is spoken by ten millions, and possesses an ancient literature. North of Madras, to the nineteenth degree of latitude, dwell fourteen millions of Dravida speaking the Telegu or Gentoo language. They extend into the interior, and thence far southward. West of these are five millions speaking the Kannadi or Canarese, the language of the Carnatic. The Gonds and Khonds of Khondistan are also Dravidians; and besides these are the Paharia in the Vindhya mountains, south of the Ganges.

The Munda family of Dravidians consists of several tribes dwelling in the low regions south of the Ganges as far as the eighteenth degree of latitude.

The Dravida type has become extensively blended with the Brahmanic, and the distinctions pointed out are based chiefly on linguistic peculiarities.* The Dravidian dialects employ a method in the formation of words which has led some philologists to range them with the "Turanian" class. Whether a real historical affinity can be proven or not, it is a very suggestive circumstance in relation to the discussion in hand that sufficient resemblance is manifest to render plausible the hypothesis of a remote contiguity, if not a consanguineous relationship between the Dravidians and the race speaking Turanian dialects. In view of the

* Whitney, *Language and the Study of Language;* Fried. Müller, *Novara-Expedition, Ethnographie*, p. 139.

sequel of the present discussion, these affinities, as well as those between Dravida and Mediterraneans, possess for us an unusual interest, and awaken a desire to know more of the Dravidian race.

It will be sufficiently exact for my purpose to merge into the MONGOLOID race* all the remaining representatives of the brown or dusky races. It will also subserve my purpose to pass them at present with a very hasty mention. The Mongoloids or Turanians are the most numerous, and by far the most widely dispersed, of all the races. These are facts which seem to possess much significance. They are characterized by long, straight, black hair, which is cylindrical in section; "by a nearly complete absence of beard and hair on the body; by a dark-colored skin, varying from a leather-like yellow to deep brown, or sometimes tending to red, and by prominent cheek-bones, generally accompanied by an oblique setting of the eyes."†

Several families of this race must be enumerated, and they have sometimes been described as distinct races. For my own part, however, I discover very sound reasons for assigning them to a close physiological relationship. The *Malay* family, which may be regarded as the oldest, had its primitive seat upon the peninsulas on the southeast of Asia, or the islands contiguous, or perhaps a continental region which has become reduced by geological denudation to some insu-

* I have experienced difficulty in fixing upon an unobjectionable designation for a group of ethnic families having this wide signification. The terms *Tatar*, *Turanian* and *Mongolian*, besides their ambiguity, have received by common usage significations too restricted. *Mongoloid*, as expressing affinity with Mongolians, without implying identification, seems, after reflection, to be the least objectionable term now in use.

† Peschel, *The Races of Man*, p. 347.

lar relics of itself. Westward, they spread by Ceylon, the southern half of which they still hold, to Madagascar and the contiguous islands of the so-called Mascarene group. Eastward, the Malays have gradually

Fig. 2.—A Malay Gentleman. From a photograph obtained by Prof. J. B. Steere.

spread over Polynesia, reaching the Sandwich Islands on the north and Easter Island on the extreme east. The Polynesian branch diverges farthest from the Mongolian type. This branch has been at many points in contact with the apparently older Papuans, and by

Fig. 3.— Leleiohoku, brother of King Kalakaua of Hawaiian Islands. Polynesian type. Photograph sent by Rev. S. E. Bishop, Honolulu. See also Figs. 48 and 49.

intercourse has given origin to a mixed sub-race, latterly known as Micronesians. These fade, in one direction, into well marked Malays, and in the other into the Papuan type.

The *Malayo-Chinese* family has for its primitive center the southeast of Asia. They dwell in Cambodia, Siam, southern Burmah, the delta of the Irawaddy, and stretch northwestward along the southern

Fig. 4.—A Muttuk Man of the Thai type of Malayo-Chinese, from Assam. (From Dalton's *Descriptive Ethnology of Bengal.*)

slopes of the Himalayas and through most portions of Thibet. Along the Indian border they present a blending with the Indian types.

The *Chinese* family, too well known to need description here, is the largest and most homogeneous family of mankind. Their language is purely monosyllabic, and the simplest of all languages in its structure.

FIG. 5.—A Fuchow Official (Taotsi). From a photograph obtained by Prof. M. W. Harrington.

The *Japanese* family presents close physical resemblances to the Chinese; but their languages are polysyllabic, and are more nearly related to the Altaic

type. The Corean dialects are closely related to the Japanese. This family passed from the continent to the Japanese archipelago, and thence to the Loochoo Islands and still farther south, displacing aborigines,

Fig. 6.—A Japanese Swordsman. From a photograph obtained by Prof. M. W. Harrington. See also Fig. 51.

which by some are supposed to be represented by the modern Aïnos yet remaining on Yezo and the Kuriles.

The *Altaic* family of Mongoloids stretches from the sea of Okotsk westward through Siberia, to the country of the European Lapps. We have no evidence of any older population throughout this vast region.

They possess a yellow or yellowish-brown skin, a flattened nose, and a broad and low skull. In other respects they present the common characteristics of the Mongoloid race. *Tungus*, to which belong the

FIG. 7.—An aged Aïno, from Yezo. From a photograph obtained by Prof. M. W. Harrington.

Mantchus, extend from the shores of Okotsk to the neighborhood of the Yenesei river. The true *Mongols*, also called Tatars and sometimes Tartars, stretch in their numerous tribes from the eastern part of the

desert of Gobi, north to Lake Baikal, and westward, as Kalmucks, to European Russia. The Turks, of which the Uighurs, Osmanlis, Yakuts, Turcomans and Kirghis are the principal branches, are spread over the wide region from the Altai Mountains through Turkestan to the Caspian Sea, and, in isolated tribes, through the Caucasus to Hungary and European Turkey. The European Turks* have lost most of their Mongoloid characters by long admixture with the Aryan stock; but their languages preserve indistinctly the evidences of their Mongoloid origin. The *Ural-Altaic* group, including the Ugrian, Bulgarian (not the present Danubian Bulgarians), Permian and Finnish branches, reaches from the eastern borders of the Obi through northern Russia to the shores of the Baltic. To this ethnic type belong, perhaps, the Basques of the Pyrenees; though Fr. Müller and others rank them with the Mediterraneans. The *Samoyeds* are found from the upper waters of the Yenesei and Obi, northward and westward to the sea of Obi and the White Sea.

The *Behring's* family of Mongoloids includes a number of north Asiatic and American tribes which dwell, or originally dwelt, about the shores of Behring's Straits. The most divergent type of these is the Eskimo; and if the Mongoloids are to be divided into distinct races, the Eskimo are entitled to an undoubted position. This type of people have migrated eastward as far as Greenland, leaving the Namollo to represent them on the Asiatic shore of the straits. The Itelmes, or Kamtskatdales, decidedly Mongolian in appearance, occupy the peninsula of Kamtskatka; the Koriaks and Chukchi range from the head of the

* Edson L. Clark, *The Races of European Turkey*, New York and Chicago, 1878.

sea of Okotsk nearly to Behring's Straits; the Aleutians occupy the range of islands to which they have given their name, and the Kolushes or Tlinkites and Vancouver tribes occupy the American mainland, and

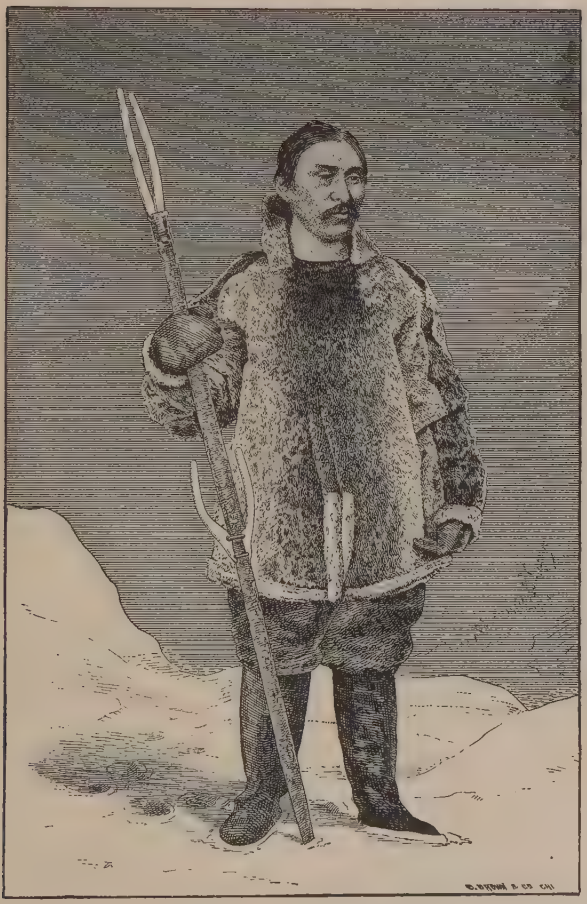


FIG. 8.—A Greenland Eskimo. From a photograph taken by Dr. Bessels, of the Polaris Expedition.

contiguous islands from Mount St. Elias to Frazer river and Puget Sound.

The *American* family of Mongoloids embraces all

FIG. 9.—Red Cloud, Chief of the Ogallala Sioux. From a photograph by W. H. Jackson.

the aboriginal population of both continents, except the Behring's tribes just mentioned. All researches hitherto made have failed to establish the existence

of more than one race, whether among the anciently half civilized or the hunting tribes; and have only resulted in the conviction that an American race of men, as distinct from Mongoloids, is only a prepossession arising from their continental isolation and remoteness from their Asiatic kinsmen, when contem-

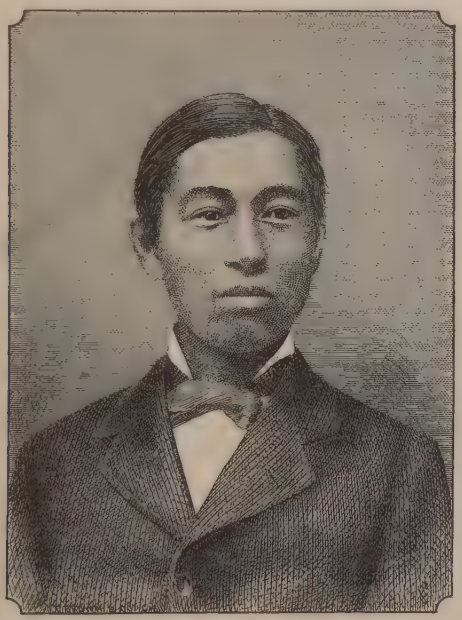


FIG. 10.—George Tsaroff, a native Aleut from Unalashka. From a photograph.

plated across the Atlantic by European Ethnologists. The physical affinities of the American Indians, especially in view of the connecting types of the Haidahs (a tribe of Tlinkites), the Aleuts, the Itelmes, the Coreans and Japanese, are sufficiently close to convince any unprejudiced student that all the populations

of America have been derived from the Asiatic continent.* Even the obliquely set eyes, so noticeable in Chinese and Japanese, is a feature often distinctly present among the American tribes; and in any event is not more infrequent than among the remote tribes of the Malayan family.†

Among black-skinned peoples we recognize no less than four races. Besides their black or very dark skins, they all have narrow heads (*dolicho-cephalous*—a term which means having long heads; but they are only relatively long because so thin) and projecting (*prognathous*) jaws. They possess long thigh bones, and sometimes, also, long arms. The shanks are lean, the pelvis is obliquely set, and the secondary sexual characters are deficient. The NEGRO race is further distinguished by short, crisped hair, each fibre of which is flattened like the fibre of wool. The beard is almost wanting, the lips are thick and prominent, the mouth often enormously large, the forehead retreating and the nose flattened. The skin is thick and velvety, and

* There lived recently in Ann Arbor a native Aleut, brought from Unalashka by Professor M. W. Harrington, of the University of Michigan, while on duty in connection with the Alaskan Coast Survey, under Professor W. H. Dall. There are sometimes, also, several Japanese students in the University and the High School; and it is instructive to remark that none but the closest observers can distinguish the Aleut from the Japanese. The Aleut, it may be added, came voluntarily to the United States to seek an education, and is making good proficiency. He is now employed in the Smithsonian Institution.

† See Peschel, *Races of Man*, pp. 402, 403, and the references there appended. "In only one physical character some American tribes differ from the Asiatic Mongols. A small snub-nose with a low bridge is typical in the latter; whereas, in the hunting tribes of the United States, and especially among the chiefs, we meet with high noses." (See the portrait of Red Cloud, Fig. 9.) A similar character, or even a "Roman" or Jewish nose, is frequently met with among the Polynesians.

emits an exhalation of a pungent, unpleasant and characteristic odor. Most Negroes also have meagre thighs, calfless legs, elongated heels and archless feet. The home of the Negro is all Africa from the southern border of the Sahara to the country of the Hottentots and Bushmen — except some portions on the extreme east, and a belt along the tenth parallel of latitude north, extending from near the west coast nearly to the center of the continent, which regions have fallen into the possession of hybrid Hamites interspersed with fewer hybrid Semites.

The *Bantu* family of Negroes occupies the known portion of South Africa from the parallel of 20° south to that of 5° north. The eastern tribes include the people of Zanzibar, and the Mozambique nations from the coast to lake Nyassa. The Betshuans are farther inland, and the Kaffir tribes belong to the east. The west coast Bantus include the Bunda nations, the Ovambo, the Ba-nguela and the A-ngola. A second division embraces the Congoes, and a third, in the northwest, includes the tribes of the Gaboon and the Cameroon mountains.

The *Soudan* family of Negroes stretches from the Atlantic coast to the valley of the upper Nile, occupying all the space between the Desert and the Bantus except the belt held by the Fulbe, who will be mentioned presently. Among them we find, in the west, tribes speaking the dialects of Joruba and Dahomey, those on the Gold Coast, and the Ashantees, Fantees and Mandingoes. Between the Gambia and the Senegal live the Joloffers, "the finest of the Negro races." Between the Niger and Bournou is spoken the Hausa language, known to Herodotus. The tribes of Bournou and those speaking the Téda stretch farther eastward, to the border of the Libyan Desert. The lowest of all

Negro tribes are found in the region of the White (or western) Nile. Here are the Shillook and Dinka tribes, which, in physical characters, also closely resemble the Fundi Negroes of the Blue (or eastern) Nile. The latter founded the kingdom of Sennaar. They have very long crimped hair, a skin possessing a strong odor, and a color "varying from brown to blue-black, with the exception of the hand and the sole of the foot, which are of a flesh-red color. The finger nails are also of an agate-brown. The lips are fleshy, but not intumescent; the nose straight or slightly aquiline, as among many Negroes of southern and western Africa." It is extremely probable that the Fundi are of mixed race.

In the district of the Niger, stretching along the tenth parallel of latitude, are found the Fulbe or Fulah, a peculiar people who have sometimes been described as a red race. By surrounding nations they are called Peuls, Foulahs, Fellani, Fellatahs and Foulan. They have a reddish, yellowish or brownish color, and oval face, a long and somewhat arched nose, teeth vertical, lips somewhat thin, figure slim and tall. The hair is black, glossy, long, and reaching to the shoulders. They are shepherds and nomads, and in religion, professors of Islam. They are said by Barth to have come from the east at a remote period.* According to other authorities they are known to have reached this region from the north. Friedrich Müller, who places them in ethnic association with the Nuba, refers them collectively to the northeast.† In any event, they are not an African type, and cannot be cited as proof of the

* Barth, *Travels and Discoveries in North and Central Africa* in 1849–55; London.

† Fr. Müller, *Novara-Expedition, Ethnologie*, p. 97 and Atlas.

diversification of the Negro race. Features, language, religion and traditions point them out as a hybridized colony of Hamites from Barbary. The Nuba are probably hybridized Hamites from the east coast. On all the borders of these nations is noticed a blending with the Negro type.

The other black race of Africa is that of the Hottentots and Bushmen. They occupy the southern parts of the continent. The common characters of these two families are the tufted matting of the hair of the head, a scantiness of hair upon other parts of the body, moderate prognathism, laterally projecting cheek bones, full lips and a narrow opening of the eyes.

The *Hottentot* family, styled by themselves Koi-Koin, speak a language of great ethnological interest, since, according to Moffat, Lepsius, Pruner Bey, Max Müller, Whitney and Bleek, it presents some resemblance to the language of ancient Egypt. Though other philological authorities dissent from this view, the existence of an opinion of this kind, so well indorsed, proves that the Koi-Koin are in possession of a language which has reached a remarkable development. Whether these people are descendants, with more or less extraneous mixture, from the ancient Egyptians, or have lived in communication with them, or some other civilized people, are questions which naturally arise for discussion. It is not impossible that even so rude a people as the Koi-Koin should have created a language as complex and polished as that which they employ; though it seems more probable that they present to-day the mere ruins of a former better condition, or the reminiscences of ancient contact with a higher race.

The *Bushman* family (called also *Bojesman*, from *Boschjes-man* of the Dutch) are of smaller stature.

Their complexion is of a leathery-yellow or brown color, and the skin becomes greatly wrinkled at an early age. The women possess an enormous development of fat upon the haunches, which is known as steatopygy, and also a character which Cuvier styles

FIG. 11.—Venus Kallipygos, of the Bushmen. From a preparation from life in the Jardin des Plantes, Paris. [See further description in chapter xvi.]

"la particularité la plus remarquable de son organization," the so-called "apron," or enormous development of the nymphæ, together with some other sexual

peculiarities. The two sexes, beyond these particulars, have but feeble secondary characters for their distinction.

The third black race is that of the AUSTRALIANS. (See Fig. 12.) They dwell upon the continent of Australia, the islands near the coast, and originally occu-

FIG. 12.—An Australian, of King George's Sound. From Prichard

pied the large island of Tasmania. Their color is always dark, sometimes black, and occasionally, on the southeast coast, light copper-red. The mouth is wide and unshapely. *The body is thickly covered with hair.* The hairs of the head are black, elliptical in section, and sometimes stand out around the head in the form

of a shaggy crown. The form of the skull is high dolicho-cephalic. In intelligence the Australians are extremely low, but not so brutal as formerly reputed. They are unacquainted, indeed, with the use of metallic implements, and their boats are mere logs, which may be regarded as the initial point in the evolution of naval structures. They have no æsthetic sense of the use of clothing, but they know how to make and use the boomerang. They have names for eight different winds, and many of them have learned to speak the English language with fluency. "They are peculiarly inventive in expressions of courtesy, which they both require and bestow freely in conversation." They possess very distinct religious conceptions, but their language is, like that of the Koi-Koin, an unexpected evidence of very considerable intellectual power and discrimination. It possesses eight case terminations, and as many numbers as the Greek. "The verb is as rich in tenses as the Latin, and has, also, terminations for the dual, and three genders for the third person. In addition to active and passive it has reflective, reciprocal, determinative and continuative forms." "We also find among them attempts at poetry, and the names of renowned poets."*

The fourth black race is that of the PAPUANS. They are distinguished by their "peculiarly flattened, abundant and very long hair, which grows in tufts and surrounds the head like a periwig or crown, eight inches high," which they train and trim into a great variety of fantastic styles.† The skin ranges from black, or nearly black (in New Caledonia), to blue-black (in Fiji) and brown, or chocolate color (in New

* Peschel, *Races of Man*, p. 333.

† See illustrations in Quatrefages, *Natural History of Man*, Am. ed., p. 129.

Guinea). The jaws are somewhat less prominent than among the Negroes, and the lips less intumescent. These contrasts are more considerable on the easterly islands. The nose is broad and long, with a drooping

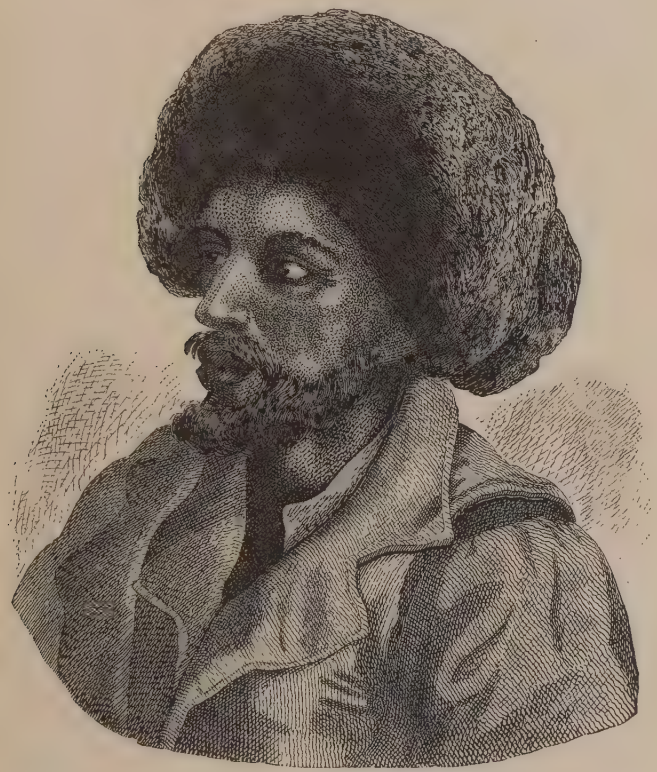


Fig. 13.—Tomboua Nakoro, a Papuan of Fiji. From Prichard.

extremity, and the legs are long and thin. Papuans of pure blood are found on New Guinea and the islands off the coast, as well as in the groups of Aru and Ke, and the islands of Waigiou, Mysol, Larat and

Timor-Laut. On the more westerly islands, in the Molucca group, on the eastern half of Floris, as well as on Chandana and all the islands to the east of it, we find the relics of an original Papuan race, now much mixed with Malay.* For the rest, the Papuans include, generally, the inhabitants of New Guinea, the Pelew Islands, New Ireland, the Solomon group, the New Hebrides, New Caledonia, the Loyalty Islands and the Fiji Archipelago. Speaking generally, the islands of Melanesia belong to the Papuan race, and those of Micronesia to a race formed by mixture of Papuans and Malays. In the opposite direction the Mincopies on the Andaman Islands belong to the Papuan race.

The Papuans are regarded by Wallace as intellectually superior to the Malays; though the latter, through contact with superior nations, have made more advances in civilization.

The following is Friedrich Müller's estimate of the population of the world, divided among the seven races which I have described:

Australians,	80,000
Papuans,	1,750,000
Negroes, including Kaffirs (11 per cent),	148,000,000
Hottentots,	50,000
Mongoloids (44 per cent),	590,040,000
Dravidians,	34,000,000
Mediterraneans or Noachites (40 per cent),	547,000,000
Fulbe and Nubas of Africa,	9,500,000
Other mixed races,	10,000,000
Total†	1,340,020,000

* Wallace, *Malay Archipelago*, Am. ed., pp. 590, 591.

† The most recent estimate of Dr. Petermann makes the total population of the world 1,424,000,000.

The foregoing enumeration distinguishes seven races. It must be confessed, however, that the circumscription of human races is a work which must be largely guided by the personal views of investigators. That racial distinctions exist is a fact sufficiently obvious, but, like the colors of the rainbow, they blend with each other along all their coterminous lines. A very marked instinctive tendency to the isolation of races undoubtedly exists, but endless intermixtures have involved the study of details in confusion inextricable, and difficulties perhaps insurmountable. Extensive districts have become populated by types presenting all that persistence and homogeneity which characterize races, but which exhibit, nevertheless, so intelligible a blending of two recognized races that the final verdict of anthropology has excluded them from the list of original types. Thus, the Micronesians, sometimes regarded as a distinct race, are probably a mixture of Papuans with Polynesians, who are themselves a variety of the Malay family. The Melanesians are Papuans, modified, probably, by intermixture, or perhaps by that influence of situation which tends slowly to introduce modifications among all organic types. The Negritos, composed of the Mincopies of the Andaman Islands, the Semangs of the interior of the peninsula of Malacca, and the Aïgtas or Aëtas of the Philippines, are regarded by Quatrefages as a distinct race, but the latest researches of Virchow and Karl Semper tend to prove that they are merely Papuans modified by a Malay element. Similarly, the Galla of Abyssinia and the remoter interior have been sometimes classed as Negroes, from the color of the skin, and sometimes regarded as remnants of a distinct black race now approaching extinction, but their long and curly hair, copious beard and European features betray their near affinity with the

Mediterranean race. These, like the Somali of the eastern promontory of Africa, may fairly be regarded as near relatives of the Semites of the eastern border of the Red Sea, if not more probably descended from

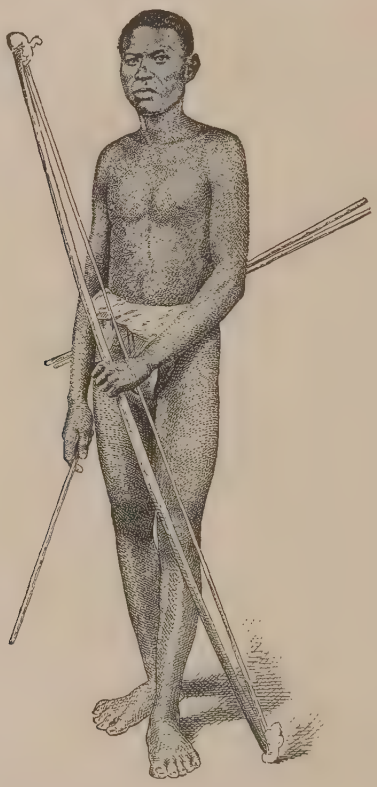


Fig. 14.—One of the Aëta, from near Manila, Luzon. From a photograph obtained by Prof. J. B. Steere.

the dark Hamitic tribes who settled in the south of Arabia, and are still represented by the black and straight-haired Himyarites. In this connection renewed reference should be made to the Fulbe or Fulah.

More unquestionable results of intermixtures are seen in the blended shades which characterize the coterminous lines of all recognized races. As on the east of Africa the black tribes have blended with Semites and Hamites, so on the north, Egyptian and Berber intermixtures have so obliterated racial boundaries that we can only say, the farther we proceed southward the more negroid becomes the type, and the nearer we approach the Mediterranean the more European the type. This state of affairs is well exemplified in the history and local variations of the Fulbe. Similarly, the primitive stock of the Turks, Magyars and Hungarians was Mongoloid, but these nationalities, west of the Euxine, have become almost completely Europeanized. It is only in tracing them eastward through the Osmanlis and Turcomans that we discover their physical relations with the Kalmucks and typical Mongols. So the Aryan population of Hindostan seems to have drunken up a great part of the dark Dravidian indigenes, and to have perpetuated their memory in the dark complexion of the modern Hindus. I am led to regard the dark complexion of the modern inhabitants of western Asia — not less the Armenians of the north than the Arabs of the south — as the reminiscence of Hamitic, Semitic and Aryan blendings, some of which date back to an epoch more remote than Abraham. So, finally, the extreme brunette or brown complexion, so often encountered in southern Europe, seems to perpetuate the effects of the ancient absorption of the Pelasgian Hamites by the later and lighter-colored Aryans — other streams of whom, avoiding Hamitic intermixtures, are perpetuated through northern Europe in the possession of their primitive fairness of skin. The dark hybrid populations of Mexico and Brazil are only other examples of wide-spread racial mixtures.

Every one must have observed, nevertheless, that the miscigenesis of races does not always result in a complete blending of racial characteristics, as is the case with the Griquas of South Africa — a hybrid of the Dutch colonists and Hottentots. This is especially noteworthy in the hybridism of South America. It is seen also in North America, where freckled, blotched and mottled complexions, uncouth extravagances of features, short life, infecundity and general sanitary feebleness, are common characteristics of mulattoes. Racial admixtures are less like the union of alcohol and water than like agitation of oil and water together. Coercion produces a more or less intimate intermixture, without a real blending of the ultimate elements of race; and a little repose discovers them in process of segregation more or less complete. It is like the grafting of the mountain ash upon an alien stock, which ever after reveals the physiological misery of the unnatural union by the drooping and contortions of its branches.

Such repugnances, it must be admitted, may yield to the prolonged attrition of repetition and usage; and hence it is impossible to take a thoughtful survey of the phenomena of racial hybridity without feeling led toward the conclusion that existing race distinctions tend to disappearance. All races, along their borders, merge into contiguous races. Undoubtedly human instincts, to say nothing of physical impediments, will long conserve the purity and distinctness of races occupying continental areas — unless, indeed, other races settle among them, — but we are constrained to recognize an inevitable tendency to a slow and final extinction of all existing racial differentiations, unless there be some other causes at work slowly augmenting racial divergences and instituting new ones.

I allow myself to pause here briefly, for the purpose of protesting against the policy of North American miscigenesis, which has been recommended by high authorities as an eligible expedient for obviating race-collisions. It is proposed to consolidate the conflicting elements by a systematic promotion of interfusion of the white and the black races. It is proposed, in short, to cover the continent with a race of Griquas. The policy is not more shocking to our higher sentiments, nor more opposed to the native instincts of the human being, than it is destructive to the welfare of the nation and of humanity. Wendell Phillips, who, if sex did not protect him, would be in danger of acquiring the title of "most eloquent platform virago," has sent down to posterity the following record: "Remember this, the youngest of you, that on the fourth day of July, 1868, you heard a man say that, in the light of all history, in virtue of every page he ever read, he was an amalgamationist to the utmost extent. I have no hope for the future, as this country has no past, but in that sublime mingling of the races which is God's own method of civilizing and elevating the world."*

Bishop Gilbert Haven, whose charming personal qualities render it painful to attribute to him similar sentiments, is recorded to have said: "We shall live to 'see Helen's beauty in a brow of Egypt.' We shall say, 'What a rich complexion is that brown skin.' . . . We shall be attracted to this hue because it is one of God's creations, and a beautiful one too; because it is the favorite hue of the human race; because, chiefly, we have most wickedly loathed and

* Wendell Phillips, Fourth of July Oration, 1868. Here is exemplified that feminine quality which prompts a woman to marry a drunkard *for the sake of reforming him.*

scorned it. . . . This law . . . is the grand undertone of all marriage. It is the Creator's mode of compelling the race to overleap the narrow boundaries of families and tribes, into which blood, so-called, invariably degenerates. . . . Amalgamation is God's word declaring the oneness of man, and ordaining its universal recognition."*

And now Canon Rawlinson has added his name to this cluster of self-appointed conspicuities. "It seems," says he, "that amalgamation is the true remedy [for the presence of Negroes in the United States], and ultimate absorption of the black race into the white, the end to be desired and aimed at."† The reader of Canon Rawlinson's article cannot but remark the inaptness of the examples cited of the harmless, or even beneficial, results of amalgamation. They are not examples of race-mixture, but only of different family stocks of the white race. The commergence of the white and the black races in America might promote the advance of the black race, by annihilating it; but what of the interests of the white race, and the civilization which it alone has created? The policy would set back humanity, so far as America is concerned, to the position which it occupied before Adam — before the long struggle of contending forces had eliminated a race capable of science and philosophy, and evolved a civilization to which no other race ever aspired. It would be to hurl back the ethnic pearls selected with long-continued labor and risk, into the all-concealing ocean of humanity.

The sort of "improvement" which the mixed race would exhibit is shown by the following table of com-

* Bishop Gilbert Haven, *National Sermons*.

† Canon George Rawlinson, in *Princeton Review*, Nov. 1878, pp. 836–7.

parative weights of brains, compiled from observations collected by Mr. Sandiford B. Hunt,* made during the civil war in the United States:

State of Hybridization.	Wt. of Brain, Grammes.
24 Whites	1424
25 three parts white	1390
47 half white, or mulattoes	1334
51 one quarter white	1319
95 one eighth white	1308
22 one sixteenth white	1280
141 pure Negroes	1331

From these figures it appears, as Topinard observes, that the white blood, where it predominates in a mixed breed, exercises a preponderating influence in favor of cerebral development; while the inverse predominance of Negro blood leaves the brain in a condition of inferiority approaching even that of the pure Negro. Fifteen sixteenths Negro blood produces a brain decidedly inferior to that of the pure Negro. "This would lead us to believe that the mixed breeds assimilate the bad more readily than the good."† A similar law obtains, according to Gould's measurements, in reference to relative capacity of the lungs, and the circumference of the chest.

The practical operation of the law had been long before noted by a scientific observer, among the mixed races of South America. Von Tschudi, speaking of them, says: "As a general rule, it may be fairly said that they unite in themselves all the faults, without any of the virtues, of their progenitors; as men, they

* Sandiford B. Hunt, "The Negro as a Soldier," in *Anthropological Review*, Vol. VII, 1869.

† Topinard, *Anthropology*, Am. ed., pp. 312, 403, 404.

are generally inferior to the pure races; and as members of society, they are the worst class of citizens."*

The following picture is not well suited to promote the miscigenetic ends of Canon Rawlinson. Dr. Samuel Kneeland, of Boston, is giving an account of the physiological condition of a miscellaneous crowd of colored people. "A recent opportunity of witnessing the landing of a large colored picnic party afforded the most striking proof of the inferiority and tendency to disease in the mulatto race, *even with the assistance of the pure blood of the black and the white races.* Here were both sexes — all ages from the infant in arms to the aged — and all hues, from the darkest black to a color approaching white. *There was no old mulatto*, though there were several *old Negroes*, and many fine-looking mulattoes of both sexes, evidently the first offspring from the pure races. Then came the youths and children, removed one generation farther from the original stocks; and here could be read the sad truth at a glance. While the little blacks were agile and healthy looking, the little mulattoes, youths and young ladies, were sickly, feeble, thin, with frightful scars and skin diseases, and *scrofula* stamped on every feature and every visible part of the body. Here was hybridity of human races, under the most favorable circumstances of worldly condition and social position; and yet it would have been difficult, and I believe impossible, to have *selected* from the abodes of crime and poverty more diseased and debilitated individuals than were presented by this accidental assemblage of the victims of a broken law of nature."†

*Von Tschudi, *Travels in Peru.* See, as parallel with this, the testimony of Dr. Barthold Seemann, cited in chapter xi.

†Dr. Samuel Kneeland, in *Proceedings American Association*, 1855, p. 250.

Similar observations have been made by many a candid and careful observer. Mr. Edward Norris says: "All recorded evidence declares mulattoes or half-castes to be more liable to disease and of shorter life than either parent, and shows that their intermarriages are decidedly less prolific than those of other persons."* Col. Charles Hamilton Smith declares: "We doubt exceedingly if a mulatto family does or could exist, in any part of the tropics, continued to a fourth generation from one stock."† Dr. Knox says: "With the cessation of the supply of European blood, the mulatto of all shades must cease."‡

These statements concern the mutual repugnance of races;§ a LAW which Nature seems to have ordained for the conservation of her successes. Its effect is to perpetuate the possession of superior traits once differentiated in the struggles of existence. That the force of circumstances often leads to the violation of this law, to the detriment of both violators, is another fact, from whose existence we may draw another class of deductions. It results in a slow tendency, as I have said, toward the absorption and disappearance of races.

* Edward Norris, in Prichard's *Natural History of Man*, 4th ed., Vol. I, p. 19.

† Smith, *Natural History of the Human Species*, Am. ed., pp. 171–2.

‡ Knox, *Races of Men.* Dr. Bachman is the only authority, so far as I know, who has maintained the unlimited fertility of mulattoes: "*An Examination of Professor Agassiz' Sketch of the Natural Provinces of the Animal World;* Charleston, 1855." But Bachman, it will be noticed, restricts himself to the affirmation of great prolificacy. He does not affirm good health or average longevity for the offspring.

§ It is strange that Mr. James Parton should be able to say that this is wholly conventional, and compare it with the antipathy between Jews and Christians, and Mohammedans and Christians. Parton, *North American Review*, Nov.–Dec. 1878.

The recognition of this tendency leads us to reflect that racial distinctions once existing may have already disappeared, or may exist to-day, as ethnologists have often remarked, only as isolated and perishing remnants of themselves. Such, probably, are the hairy Aïnos of Japan. The Hottentots, as Friedrich Müller suggests, are merely a racial ruin.* The conviction arises, also, that a process so visible cannot have endured through a vast number of ages, without having already reached its finality. Human existence, accordingly, could not reach back to an extremely remote antiquity.

On the contrary, these racial divergences seem to have arisen by descent from some common stock. The most opposite theories agree in this. The tendency to differentiation of races is a force ever antagonizing the tendency to obliteration. Old races may die, but new races and better races are born. This is the outcome of the broad scientific view. In such case, the unification of races could only result from the successive extinction of the inferior races, and the final survival of the highest. But this is an impossible conception, since the repulsive force will never cease to work till all the conditions of existence are universally equalized.

The old question of the zoölogical value of the intervals separating races has been vacated of all importance. The differences existing are patent to all observation. There they are, beyond all question; call them what you will, that will not alter their value, their significance or their force. Call them varietal, racial, specific or generic in value; that does not affect

*On the extinction of races, see a suggestive body of facts compiled by Darwin, in *The Descent of Man*, revised ed., pp. 181–192.

in the least the nature and the reality of the thing which we contemplate, and its implication as a phenomenon in the course of Nature's processes. Undoubtedly, racial distinctions are as wide as those which we regard of specific value among Quadrumana and other Mammals.* But like them, racial distinctions are fleeting phenomena. They exist only as present facts; and, whatever their value, they do not obliterate or diminish the blood-relationships which run through a group of affiliated types. Whether we pronounce mankind as composed of several races or several species, we must equally admit their intimate consanguinity, and their common psychic constitution.†

*A view long and earnestly maintained by L. Agassiz. See corresponding views of Dr. J. C. Nott, in *Types of Mankind*, and Theodor Poesche, in *Die Arier*, pp. 9–11 and farther.

†The question of the value of the distinctions among the different types of mankind has been discussed by Darwin, in *The Descent of Man*, revised ed., chap. vii, pp. 176–181.

CHAPTER VII.

LIMITED SCOPE OF BIBLICAL ETHNOGRAPHY.

IN the light of this general survey of humanity, let us contemplate the restricted scope of the populations of which the tenth chapter of Genesis speaks. Let us place before us a map of the world. Here is

Comparative extent of the Genesiacal Dispersion.

the Mediterranean Sea, along whose southern shores had wandered the tribes descended from Mizraim. Here is the Red Sea, along whose borders were dispersed the posterity of Cush and Arphaxad. Here is the Persian Gulf, and here are the broad plains of Mesopotamia, which mark the regions of the early dispersion of the posterity of Cush. Here is the Euxine, and here the Caucasus, whose borders and slopes and valleys witnessed the primitive advent of the tribes of Gomer and Magog. We fix our attention

upon the land of Canaan, and observe that its position is nearly central between the extreme limits of the Genesiacal dispersion. From this center the vision of the sacred ethnologist went forth and discerned the distribution of the nations in his day. It penetrated as far as the conditions of the civilization then existing rendered it practicable. It reached, at least, far enough to ascertain to what limits the posterity of Noah had wandered.

But how insignificant a spot did these wanderings cover! The whole geographical extent of the Noachidæ does not embrace more than one-fifteenth of the territory which we now find populated by man. Was this an attempt to explain the origin of all the nations of the world? Does this genealogical map imply that the regions beyond its limits were then unoccupied by human beings? Does it mean that the various tribes and nations which are now spread over the earth have arisen from the wider dispersion of the sons of Noah? Have the black tribes of Africa and Australia and Melanesia, and the brown nations of Asia and America and Polynesia, been produced from the posterity of Noah during the interval which separates us from the flood? Yes, says the catechism, which, under cover of religious instruction, assumes to indoctrinate our children in ethnological science. Yes, yes, says the commentator, who experiences no difficulty in swallowing the exegetical and indigestible crudities which have been the heirlooms of the church for two thousand years. Yes, yes, yes, exclaims, too unanimously, the modern teacher of "divine truth," all unconscious that the science of ethnology has made visible advances since Jerusalem was the center of the world.

To all these questions I reply in the negative. These are questions of "secular science," and science enjoys

the inalienable prerogative of furnishing answers to them. But I shall show not only that science sustains the negative, but that the RECORD itself both implies and demands it.*

It is fair to inquire, in reaching the answers to these questions rationally, whether we have traced the dispersed Noachidæ to the utmost limits assigned by the Genesiacal chart.† All our old maps of Africa designate the vast interior of the continent as "Ethiopia," and our English bibles make frequent mention of Ethiopia as populated by a dark-skinned people, who were presumably African Negroes. Where was the biblical Ethiopia? Was it located in the interior of Africa and inhabited by Negroes?

To this question I have already cited the negative

* Here, at the outset, is Canon Rawlinson's verdict: "We must only look to find in this [ethnographical table] an account of the nations with which the Jews, at the date of its composition, had some acquaintance." (*Origin of Nations*, p. 169.) "It does not set up to be, and it certainly is not, complete. It is a genealogical arrangement of the races best known to Moses and to those for whom he wrote, not a scientific scheme embracing all the tribes and nations existing in the world at the time." (*Ib.* p. 252.)

† Dr. D. D. Whedon says: "*Kham* means black, and the old Coptic name of Egypt was *Khemi*. Now it is remarkable that according to Moses the posterity of this *black* patriarch streams *southward*, down into Africa, beyond the light of history, able in a few thousand years to fill a whole continent." This is, indeed, startling information. If all this is "*according to Moses*," further discussion is foreclosed. We were only seeking to know what *is* according to Moses. Has Dr. Whedon some undisclosed source of information? I fear the work still remains for me to show that *Kham* does not necessarily signify *black*, and that if it signifies black as a designation of Egypt, it is more likely to refer to the color of the soil; and that the descendants of Ham have never been pronounced black, and that Moses does not intimate that Ham was a "black patriarch," or that his posterity "streamed down into Africa" so prolifically as to cover the continent with Negroes and Hottentots "in a few thousand years,"—that is, in *two* thousand years, as I shall show in chapter xiii.

reply of modern ethnology, which informs us that Ethiopia, so-called, was located in the peninsula now known as Arabia; possibly, also, stretching across the Red Sea into eastern Africa, since that sea, as has been said by Palgrave, served rather to unite than to divide the two regions. I wish now to confirm that response by interrogating the sacred record itself.

1. The word Ethiopia, or Æthiopia, is adopted from the Greek version of the bible. It is derived from αἴθω (*aitho*), *to burn*, and ὤψ (*ōps*), the *face*, and signifies *the land of the sun-burnt*. This word is not found in the original text, but in its stead the Hebrew word KUSh. The latter occurs in the Old Testament thirty-nine times. In five instances it has been transliterated as "Cush," and in thirty-four instances translated as "Ethiopia," "Ethiopian" or "Ethiopians." I am acquainted with no reason for this discrimination, and feel constrained to regard it as purely capricious. The Septuagint had employed the term *Aithiopia*, which, indeed, is a correct translation, and our English translators, relying, as I have before said, on the version of the LXX, have adopted their translation of KUSh.

2. The first biblical mention of KUSh is in Genesis ii, 13: "The name of the second river Gihon; that which encompasseth all the land of KUSh." As long as we locate KUSh in the heart of Africa, this passage is unintelligible; but when we seek for KUSh in the Arabian peninsula, we apprehend at least a geographical relation to the rivers of Eden.

3. Again, in Numbers xii, 1, the wife of Moses is denominated a KUSIT — a KUSh-ean ("Ethiopian") woman; was she a Negress? No, for Tsipora (Zipporah) the wife of Moses was one of the seven daughters of a priest (or CoHeN) of Midian (Exodus ii, 16–21) whose name was Jethro (Exodus iii, 1). Who

were the Midianites? Every biblical cyclopædia informs us that the Midianites were Arabians, dwelling principally in the desert north of the peninsula of Arabia, extending southward along the eastern shore of the gulf of Eyleh, and northward along the eastern frontier of Palestine. Ethiopia consequently included these regions.

4. In Ezekiel xxix, 10, we find the following: "I will make the land of Mizraim (Egypt) utterly waste and desolate [a waste of wastes] from the tower of Syene even unto the borders of Ethiopia [Cush]." Now, Syene, by all admissions, was located on the southern border of ancient Egypt. If Ethiopia was the country next south of Egypt, the passage signifies "from Ethiopia to Ethiopia," which is meaningless. But if Ethiopia was an Asiatic country, the biblical phrase carries our thoughts across the longitudinal extent of Egypt, and becomes intelligible and expressive.

5. In Isaiah xi, 11, it is said, "The Lord shall set his hand again the second time to recover the remnant of his people which shall be left, from Assyria, and from Egypt, and from Pathros, and from Cush, and from Elam, and from Shinar, and from Hamath, and from the islands of the sea." Now, remembering that Pathros was undoubtedly included in Egypt (Ezekiel xxix, 14), that Hamath was north of Phœnicia, that the islands of the sea were held by Javanites or Ionians, and that Elam and Shinar bordered on the Persian Gulf,—Cush, the remaining country, was probably not isolated from these by an interval of fifteen hundred miles, but must probably be represented by Arabia, which was embraced within the geographical circumscription named. Moreover, the Lord's people were to be recalled from regions in which remnants of

them remained. But the Hebrews neither colonized in African Ethiopia, nor were carried captive to that region, nor had any acquaintance with that part of Africa. And, finally, the posterity of Cush settled chiefly, if not wholly, in Arabia and around the Persian Gulf. Quite in confirmation of this conclusion is 2 Chronicles xxi, 16, where, in connection with the Philistines, are mentioned "the Arabians that were near the Ethiopians." So Ezekiel xxxviii, 5, connects Cush with northern and mostly Asiatic nations. Cush, also, is rather Arabian than African in Isaiah xliii, 3, and xlv, 14.

6. The eighteenth chapter of Isaiah has been described as a "splendid summons to the Ethiopians as auxiliaries to the Egyptians in the struggle against Sennacherib."* Now I fail to extract this meaning from the sacred text. It does not appear that Sennacherib was at all concerned, nor that the appeal was to the Ethiopians. "The rivers of Cush," beyond which dwelt the people addressed, were not the White and Blue Nile,† but the "torrents of Egypt"—the "streamlets of Mizraim,"—the Besor, Corys (now Wadée el Arish) and the Seyl (the winter brook), which divides Palestine from Egypt at Rhinocorura. To a dweller in Palestine, the region "beyond the rivers of Cush"‡ was Egypt; and the prophet's appeal was made to the Egyptians instead of the Ethiopians, as Rosellini§ long since showed.

* McClintock and Strong, *Cyclopædia*, Vol. III, p. 326; Smith, *Dictionary of the Bible*, Vol. I, p. 588.

† It is never pretended that Ethiopia extended south of the junction of the White and Blue Nile. In this view the "rivers of Cush" would have to be answered by the main stream of the Nile.

‡ See the same expression in Zeph. iii, 10, where the reference seems equally to be to the Egyptians.

§ Rosellini, *Monumenti Civili*, ii, pp. 394–403.

Further evidences will come to light in examining the arguments which have been employed to prove that Cush of the early Hebrews was located above Egypt, and "was the land of the Negroes."*

1. "Can the Ethiopian [Kushean] change his skin, or the leopard his spot?" (Jeremiah xiii, 23), is a text supposed to prove that the Ethiopians were Negroes.† But the "sunburnt" Hamites must have been sufficiently noticeable for their dark complexion to give pertinence to such a query. Indeed, remnants of the primitive Arabian Hamitidæ, preserved to our times, are described as "very tall men and almost black."‡

2. The account given in 2 Chronicles xiv, 9, 12, and xvi, 8, of the rout of "Zerah the Cushean" with his million men, by Asa, and the pursuit to Gerar, whence an immense amount of booty was taken to Jerusalem (v. 15), is generally regarded as referring to *African* Cushites. But Forster has shown that Gerar "lay on the border of the Amalekites and Ishmaelites, between the kingdom of Judah and the wilderness of Shur and Paran." The scene of the battle was, therefore, in Arabia, and Zerah the Cushite was an Arab potentate.

Similarly Tirhakah, king of Ethiopia (2 Kings xix, 9), has been supposed an African monarch; but why? His movement against Hezekiah was observed by the king of Assyria, and announced by that king to Heze-

* McClintock and Strong, *Cyclopædia*, Vol. III, p. 326.

† "In the Bible, a Cushite appears *undoubtedly* to be equivalent to a Negro, from this passage." McClintock and Strong, *Cyclopædia*, Vol. III, p. 327.

‡ See Burkhardt's description of the Dowaser tribe of Arabs. The Bedawees on the Persian Gulf are similarly dark. A like erroneous interpretation has been applied to Solomon's Song i, 5, 6: "I am black, but comely. . . . Look not upon me, because I am black." Here "brown" or "sunburnt" is the term to be employed instead of "black."

kiah. Does it seem necessary to suppose the Assyrian king would learn of the approach of an African warrior sooner than Hezekiah, whose dominions were contiguous to Africa? Again, in Isaiah xx, 3, 5, the association of Egypt and Ethiopia would be the same, whether we conceive the latter on the east or south of Egypt. Whether African or Asiatic, Ethiopia was probably contiguous to Egypt. The same remarks will apply to Daniel xi, 43, Nahum iii, 9, and other passages, where the two countries are associated. There is not a passage at all conclusive that Cush was African in patriarchal times.

3. The mention of Phut, Lub and Lud, in connection with Cush (Psalms lxviii, 31; Isaiah xx, 3, 4; xliii, 3; xlv, 14; Jeremiah xlvi, 9; Ezekiel xxx, 5) may be admitted to imply geographical proximity; but it may as well signify proximity upon the east as upon the south. Hamitic Egypt and Hamitic Arabia would be naturally associated; and as long as all admit that many Cushean Hamites settled in Arabia, while it is at least doubtful whether Cushean or other Hamites settled, primitively, south of Egypt, it seems decidedly safer to recognize Cush as wholly Arabian in early times.

4. The weightiest argument with which I am acquainted is based upon a similarity between the Hebrew word KUSh and the Egyptian name of a country bordering on Egypt on the south. This is spelt KSh, and is supposed to have been vocalized as KaSh, KeSh or KiSh. The Egyptian name has been regarded as identical with the Hebrew; and this supposition was favored by the Coptic use of *Ethaush* and *Koush* for the scriptural Cush. But the Coptic version seems to have been made from the Septuagint, and the Coptic term is a strict translation of "Aithiopia," which, as

early as Alexandrian times, was supposed to refer to an African country. Now KSh does refer to an African country; but "Aithiopia," as an equivalent for KUSh, does not. Moreover, the words KSh and KUSh are *radically* different. In the Hebrew word "U" is a radical element of speech, while the Egyptian word is without this or any other vocalization as a radical element. The two words are names of two different countries. KSh or KiSh designated Nubia;* KUSh was the name of Arabia.

But suppose the two words equivalent; the Egyptian paintings show that the KiSh were generally *mahogany-colored*, instead of black; and therefore Hamites instead of Negroid.

Even if it had to be admitted, finally, that the weight of evidence is in favor of an *early*† African Ethiopia, it does not follow that the Ethiopians were members of the Negro race. It appears, truly, that Nubia, which occupies the position of the hypothetical African Ethiopia, has, from time immemorial, been populated by a dark race with whom the Egyptians had much intercourse; but these are never represented as Negroes.‡ In the meantime, the Negroes were well known to the Egyptians, and their features and

*The name Kish is still preserved at Tutzis in Nubia, the modern *Gerf Hussèyn*.

†There is no doubt that in classical history the name Ethiopia had become transferred to the region immediately south of Egypt.

‡It was one of the triumphs of Chevalier Lepsius to ascertain that "the Ethiopian civilization was in fact Egyptian, introduced 2000 years before Christ; that the Ethiopians of Meroë were not a *black* but a *brown* Caucasian race." *American Cyclopædia*, art. "Lepsius." See also McClintock and Strong, *Cyclopædia*, Vol. III, p. 82: "These Ethiopians and the Egyptians were *not Negroes*, but a branch of the great Caucasian family"; a statement to be compared with the one before quoted, "A Cushite appears undoubtedly to be equivalent to a Negro," Vol. III, p. 327.

complexion have been often depicted on the monuments. Correspondingly, when the ancient Hebrews had occasion to mention the Negroes, they were not denominated KUShI.

Fig. 15.— Nubians and Negroes driven before the chariot of Rameses II. From a reduction by Cherubini.

A careful examination of the reasons which have been assigned for regarding the country of Cush as African, shows that they are not very substantial; while, on the contrary, all the biblical texts cited become more intelligible and more coherent with each other, and with archæological and ethnological facts, when we assume that the early Hebrew Cush always refers to the dark-skinned Hamitic Arabians, whose tribes and affiliations I have already* traced to the eastern and southern shores of the Himyaric peninsula.†

*Chapter III. It will be noted, however, that in later times Arabia became overspread generally with Semitic Joktanidæ, and still later with Semitic Ishmaelitidæ.

†The Targum of Jonathan translates KUSh by "Arabia"; and this view is defended at length by Bochart, in *Phaleg*, lib. iv, cap. ii.

CHAPTER VIII.

A GLANCE AT HEBREW CHRONOLOGY.

BEFORE the solution of the problem of Preadamites can be reached, it is necessary to know how much time is at our disposal. By general admission, the biblical ethnology does not mention, and was not intended to mention, races and nations of men which in our day have spread over regions remote from the ancient Hebrew center. On the assumption that Adam was a representative of the White race, and that all existing races are descended from him, the solution of the problem involves two quantities whose values must be ascertainable. *First*, it must be shown that a susceptibility of variation exists to such an extent and in such a direction as to render probable the passage from the highest to the lowest races in a series of generations. *Second*, it must be shown that time enough elapsed for this divergence between the epoch of Adam's advent and the epoch at which racial divergences had been accomplished. Let us first examine what time chronology affords us.

It is hardly disputed that the Hebrew documents supply the most ancient information which can be styled historical. If Moses placed on record the material embraced in the tenth chapter of Genesis, its authorship reaches back, at the most moderate estimate, to the seventeenth century B.C. The events narrated pertain to periods attaining an antiquity a thousand years more remote. The accuracy of the eth-

nological statements which we have examined inspires a belief that, if chronological data can be extracted from these writings, they will afford us substantial ground to stand upon. Such data, however, seem to be lacking. The Hebrews, like all the other nations of high antiquity, seem to have been destitute of the chronological instinct.

If we open a modern Jewish book of rituals we shall find the date expressed in "the year of the world." If we open to the first chapter of our English bibles, we shall see placed in the margin the words "4004 before Christ." The creation of the world is thus assumed as a fixed and ascertained epoch. On this fixed date all other marginal chronology of the Pentateuch depends.

It is greatly to be regretted that unanimity in the acceptance of this epoch of creation is not as complete as the reassuring silence of the standard edition of the Bible would fairly imply. The truth is, that 4004 B.C. for the epoch of Creation is only one among many results which different investigators have reached, after assuming that the world came into existence suddenly, by a fiat. Hales* has tabulated not less than one hundred and twenty estimates founded on different manuscripts and versions of the Hebrew text. Other results are furnished by de Bretonne.† From these and other sources I select the following exhibit:

EPOCH OF CREATION ACCORDING TO VARIOUS AUTHORITIES.

I. BIBLICAL TEXTS AND VERSIONS.	B.C.
Septuagint, computation, - - - -	5586
Septuagint, Alexandrinus, - - - -	5508

* Hales, *Analysis of Chronology*, 2d ed., 1830, Vol. I, p. 212.

† De Bretonne, *Filiations et Migrations des Peuples*, Paris, 1827, pp. 428–436.

Septuagint, Vatican,	5270
Samaritan computation,	4427
Samaritan text,	4305
Hebrew text,	4161
English Bible (Usher chronology),	4004

II. JEWISH COMPUTATIONS.

		B.C.
Josephus,	Playfair,	5555
	Jackson,	5481
	Hales,	5402
	Universal history,	4698
Talmudists,		5344
Seder Olam Sutha,		4339
Jewish computation,		4220
Jewish computation,		4184
Chinese Jews,		4079
Some Talmudists,		3761
Vulgar Jewish computation,		3760
Seder Olam Rabba, Great Chronicle of the World, A.D. 130,		3751
Rabbi Lipman,		3616

III. CHRISTIAN AUTHORITIES.

	B.C.
Bunsen,	20000
Rev. T. P. Crawford (in *Patriarchal Dynasties*, p. 164),	12500
Suidas,	6000
Clemens Alexandrinus, A.D. 194,	5624
Vossius,	5590
Nicephorus Constantinopolitanus,	5500
Hilarion,	5475
Rev. Dr. Hales,	5411
Poole,	5361
Montanus,	5336
St. Julian and the LXX,	5205

Eusebius Cæsariensis,	5200
Origen, A.D. 230,	4830
Kennedy, Bedford, Ferguson,	4007
Usher, Lloyd, Calmet and popular opinion,	4004
Helvetius, Marsham,	4000
Petavius,	3983
Melancthon,	3964
Luther,	3961
St. Jerome and Beda,	3952
Scaliger,	3950
Montanus,	3849
Hebrew text,	3834

The interval between the assumed epoch of Creation and the Noachian Deluge presents an equally instructive range of opinion.

THE DELUGE AFTER ADAM.	A.M.
Bunsen,	10000
Rev. T. P. Crawford,	7727
Poole,	2262
Hilarion,	2257
Josephus, Vossius, Riccioli, Hales, Jackson,	2256
Suidas, Nicephorus, Eusebius, St. Julian, St. Isidore,	2242
Clemens Alexandrinus,	2148
Cornelius à Lapide,	1657
St. Jerome,* Beda, Montanus, Scaliger, Origanus, Emmius, Petavius, Gordonus, Salianus, Torniellus, Hervartus, Phillippi, Tirinus,	1656
Samaritan Pentateuch (generally),	1307

* St. Augustine says: "From Adam to the Deluge, according to our Sacred Books [i. e. the Septuagint], there have elapsed 2242 years, as per our exemplars; and 1656, according to the Hebrews."

The interval between the Deluge and the Christian Era has been calculated as follows:

THE DELUGE, BEFORE CHRIST.	B.C.
Bunsen,	10000
Bishop Russell,	5060
Rev. T. P. Crawford,	4763
Septuagint,	3246
Jackson,	3170
Hales,	3155
Josephus,	3146
Poole,	3099
Samaritan text,	2998
Prof. James Strong,	2515
Usher and English Bible,	2348
Calmet,	2344
Petavius,	2327
Hebrew text,	2288
Common Jewish computation,	2104

Biblical chronology has been largely based on statements respecting the ages of the patriarchs. But in this respect the different versions vary to a wide extent. This is illustrated by the following table:*

* Rev. E. B. Elliott, *Horæ Apocalypticæ*, iv, p. 254, note; London, 1846. McClintock and Strong, *Cyclopædia*, art. "Chronology."

AGES OF THE PATRIARCHS.

Names.	Hebrew.	Samaritan.	Septuagint.	Josephus.
1. Adam, - - - - -	130	130	230	230 [330]
2. Seth, - - - - - -	105	105	205	205 [105]
3. Enos, - - - - -	90	90	190	190
4. Cainan, - - - - -	70	70	170	170
5. Mahalaleel, - - -	65	65	165	165
6. Jared, - - - - -	162	62	162	162
7. Enoch, - - - - -	65	65	165	*(1)65 [187]
8. Methuselah, - - -	187	67	187 [167]	187 [177]
9. Lamech, - - - -	182	53	188	182 [82]
10. Noah (at the Flood),	600	600	600	600
Adam to Flood, - - -	1656	1307	2262	2256
11. Shem (100 yrs. at Fl.),	2	2	2	12
12. Arphaxad, - - - -	35	----	----	----
[Cainan spurious], -	----	----	130	----
13. Salah, - - - - -	30	130	130	130
14. Heber, - - - - -	34	134	134	134
15. Peleg, - - - - -	30	130	130	130
16. Reu, - - - - - -	32	132	132	130
17. Serug, - - - - -	30	130	130	132
18. Nahor, - - - - -	29	79	79 [179]	120 [109]
19. Terah (Gen. xi, 32; xli, 4)	130	130	130	130 [130]
Flood to Abraham, - -	352	1002	1002	1053
Adam to Abraham,† -	2008	2309	3264	3309

The estimates which I have tabulated respecting the epochs of Creation and of the Deluge exhibit an enormous range of opinion in reference to the two great

* 165 is probably the correct reading.

† Further, on this subject, see Luke Burke, *Ethnological Journal*, 1848, 27, 28, 82, 83, 84, 87, 78–91; *Vetus Testamentum Hebraicum cum variis lectionibus*, fol., Oxon., 1776–80, and *Vetus Testamentum Græcum cum variis lectionibus*, fol., Oxon., 1798–1827; McClintock and Strong, *Cyclopædia*, art. "Chronology"; Smith's *Dictionary of the Bible*, art. "Chronology." See also a learned discussion and an extended Chronological Table by Dr. James Strong, in *Methodist Quarterly Review* for July, 1856, p. 448, and October, p. 600.

events from which the population of the world is reputed to have proceeded. I am not aware of any specially cogent considerations which render any one of the moderate estimates more plausible than another. On general principles, the extreme estimates may be regarded less probable than the others. But, disregarding these, we are struck by a divergence of opinion so great as to render highly unsafe any pretensions to precise biblical chronology.* Omitting the extreme estimates of Bunsen and Crawford, we have, between Suidas and Rabbi Lipman, a discrepancy of 2384 years; and these and all the intervening results claim

* Nevertheless, credulity, which would be amusing if it were not arrogant, has at times fixed on precise months, days and hours! "And now," says Rev. Dr. Lightfoot, "hee that desireth to know the yeere of the world, which is now passing over us this yeere, 1644, will find it to be 5572 yeeres just now finished since the Creation; and the yeere 5573 of the world's age, now newly begunne this *September at the Æquinox*." (Lightfoot, *Harmony of the Foure Evangelistes*, London, 1644, 1st part, Proleg., last page.) Again: "VIth day of Creation . . . his [Adam's] wife the weaker vessell; she not yet knowing that there were any devils at all . . . sinned, and drew her husband into the same transgression with her; this was about *high noone*, the time of eating. And in this lost condition, into which Adam and Eve had now brought themselves, did they lie comfortlesse, till toward the cool of the day, or *three o'clock* afternoone . . . [God] expelleth them out of Eden, and so fell Adam *on the day* that he was created." (Lightfoot, *Harmony, Chronicle and Order of the Old Testament*, London, 1647, p. 5.) Another authority says: "We do not speak of the theory set forth in a work entitled *Nouveau Système des Temps*, by Gilbert, father and son. This system, which is not so new as its title seems to announce, gives the world only 3600 years of duration, down to the 1st of July, 1836; and makes Adam's birth 1797 years before J. C., on the *1st of July*." (De Bretonne, *Filiations et Migrations des Peuples*, Paris, 1827, Vol. II, p. 160.) And again: "It is, besides, generally allowed by chronologists, that the beginning of the patriarchal year was computed from the autumnal equinox which fell on *October 20th*, B.C. 4005, the year of the Creation." (Rev. F. Nolan, *The Egyptian Chronology Analyzed*, London, 1848, p. 392.) So far as I know, modern theology does not sympathize with such pretensions.

to be based on inspired revelation. It must be quite apparent that Revelation, whatever its authenticity, has not revealed the age of the world. With the same exclusions, we find a range of 955 years in the estimate of time between the Creation and the Deluge. This is fifty-seven per cent of the whole interval as commonly accepted. But Crawford's calculation, also based strictly on biblical data, gives a discrepancy of 6420 years, which is nearly four times the generally accepted interval. The date of the Deluge, by common Jewish computation, is 1142 years less remote than according to the Septuagint, and 2659 years more recent than Crawford's judgment places it.

The creation of the world, if we place any reliance upon geological evidences, was not a compact event which can be referred to any definite date as an epoch. If we attribute to the "creative days" the extended, æonic signification requisite to effect a tolerable adjustment with geological periods, it still remains to view the advent of Adam as a well defined event, naturally referable to a precise epoch; and this may be assumed as the date which stands for the "epoch of Creation." According, then, to the leading interpretations which have been put upon the biblical documents, the appearance of Adam on the earth must be held to have taken place between 3834 B.C. and 6000 B.C.

On biblical authority, sustained by many traditions, a great deluge occurred in western Asia at a date which, following the moderate estimates again, must range between 1656 and 2262 years after the advent of Adam. The majority of biblical students have regarded this deluge as causing the destruction of all mankind, except Noah and his family. They hold, accordingly, that all existing populations are descended from this family. Most others, who maintain the local

nature of the deluge, hold that all existing populations are descended from Adam, and that the popular chronology affords all the time requisite for the growth of ethnic distinctions.

As to the time allowed by a chronology based on biblical interpretation, I have no motive for desiring it long or short. It is fair to presume that biblical students have done the best which is possible in reference to sacred chronology. If the results reached conflict with other chronologies, or with the facts of science, it is gratifying to know that the Bible itself is so thoroughly *unchronological* that the collision can be felt only by chronological theorists, who have endeavored to deduce from the bible lessons which it does not teach.

"From this discrepancy," says the orthodox Prichard, "we may infer securely, as it seems to me, that the biblical writers had no revelation on the subject of chronology, but computed the succession of time from such data as were accessible to them. . . . By some it will be objected, to the conclusions at which I have arrived, that there exists, according to my hypothesis, *no chronology*, properly so termed, of the earliest ages, and that no means are to be found for ascertaining the real age of the world. This I am prepared to admit; and I observe that the ancient Hebrews seem to have been of the same opinion, since the scriptural writers have always avoided the attempt to compute the period in question. . . . Beyond that event [the arrival of Abraham in Palestine] we can never know *how many centuries, nor how many chiliads of years* may have elapsed since the first man of clay received the image of God and the breath of Life."* So

* Prichard, *Researches into the Physical History of Mankind*, 1847, Vol. V, note on the Biblical Chronology, pp. 557, 560, 569, 570.

Baron Bunsen: "As regards the Jewish computation of time, the study of Scripture had long convinced me that there is in the Old Testament *no connected chronology prior to Solomon*. All that now passes for a system of ancient chronology, beyond that fixed point, is *the melancholy legacy of the seventeenth and eighteenth centuries*— a compound of intentional deceit and utter misconception of the principles of historical research." * Sylvester de Sacy, one of the most erudite orientalists of the age, and at the same time a devoted christian believer, used to say "There is no biblical chronology." † The abbé Le Hir, a learned and venerable ecclesiastic, recognized as an oracle of sacred exegesis, has borne testimony that "biblical chronology is uncertain; it is left to human sciences to discover the date of the creation of our species." ‡ François Lenormant himself, who formally declares his adhesion to the doctrine of the inspiration of the Sacred Scriptures, admits: "The first element of a real and scientific chronology is absolutely wanting; we have no element for determining the measure of the time by means of which the ages of the patriarchs are computed; and nothing is more vague than the word 'year' when no precise explanation of it is given." §

* Bunsen, *Egypt's Place in Universal History*, London, 1848, Vol. I, Preface, pp. 1, 2.

† "Il n'y a pas de chronologie biblique."

‡ Quoted by F. Lenormant, in *Les Premières Civilizations*, Vol. I, p. 53.

§ F. Lenormant, *Les Premières Civilizations, Etudes d'Histoire et d'Archéologie*, Paris, 1874, Vol. I, p. 53. The biblical genealogies, he says, have no other object than other Semitic genealogies — those of the Arabs, for instance,— and that is, "to establish a direct affiliation by means of the most salient personages, omitting many intermediate degrees." (*Ib.*, p. 54.) "C'est pour ces raisons décisives *qu'il n'y a pas en réalité de chronologie biblique*." See also his *Ancient History*, Eng. trans., Vol. I, p. 40.

Such is the general opinion of critical investigators, among whom I might further cite Rev. Dr. John Kenrick, Prof. Charles Lenormant, Luke Burke, as well as Lesueur, Barruchi, Lepsius, Kennicott, and many others. Instead, therefore, of feeling constrained by the demands of biblical chronology, we may feel perfectly free to seek the world's dates from every accessible source. We may admire, then, without envying, the sweet and serene credulity with which a distinguished theologian characterizes these dateless chronicles as "the *circumstantial, positive*, CLOSELY CONNECTED series of biblical annals." *

As, however, I am reasoning with biblical interpreters on the basis of their own assumptions respecting Hebrew chronology, I will adopt for my use, from Prof. James Strong,† the following datum:

End of the Deluge, 2515 B.C.

The epoch of Creation, or advent of Adam upon the earth, I will assume at the date which christian chronologers have been content to adopt from Archbishop Usher:‡

Creation of Adam, 4004 B.C.

From these data we get
From Adam to the end of the Deluge, 1489 years.

* *Methodist Quarterly Review*, April, 1878, p. 206.

† Prof. James Strong, "Egyptian Chronology," in *Methodist Quarterly Review*, April, 1878, p. 1, and July, 1878, p. 462, table. See also the elaborate article on "Chronology," in McClintock and Strong's *Cyclopædia*.

‡ Usserius Jac., *Annales Veteris Testamenti; una cum Rerum Asiaticarum et Ægyptiacarum Chronico*. Fol., London, 1650.

CHAPTER IX.

ELEMENTS OF EGYPTIAN CHRONOLOGY.

NEXT to the Hebrew documents, no records pretend to reach so high an antiquity as those of Egypt. They do not aspire to date from the creation of the world, nor do they trace the descent of mankind from a single family divinely rescued from a pœnal deluge; but they furnish a basis for chronological estimates which remount, in the hands of the German Egyptologists, to an antiquity quite fabulous. Even dismissing these fabulous claims, Egyptian history is thought by some eminent authorities to reach back far beyond the date commonly assigned for the appearance of Adam. These facts seem to have created an exigency which all predetermined reliance on so-called biblical chronology has felt summoned to meet.* Egyptian chronologers are thus divided into two schools: those who hold to the *long* chronology, and

* "I am aware that the Era of Menes might be carried back to a much more remote period than the date I have assigned it; but, as we have as yet no authority further than the uncertain accounts of Manetho's copyists to enable us to fix the time and the number of reigns intervening between his accession and that of Apappus, I have not placed him earlier *for fear of interfering with the date of the deluge of Noah*, which is 2348 B.C." (J. G. Wilkinson, *Topography of Thebes and General View of Egypt*, London, 1835, pp. 506, 509.) Again: "We are led to the necessity of allowing an immeasurable time for the total formation of that space which, to judge from the very little accumulation of its soil, and the small distance it has encroached on the sea, since the erection of the ancient cities within it, would require ages, and throw back its origin *far beyond the deluge*,

those who hold to the *short* chronology. The short chronologers endeavor to keep within some admissible theory of Hebrew dates; the long chronologers entirely ignore the Hebrew dates, and do not deem it important to adjust Egyptian chronology to any existing scheme of Hebrew chronology.

The sources of information respecting the chronology of Egypt are scanty, dislocated and irreconcilable. The Egyptians did not surpass the Hebrews in the possession of a chronological instinct. "The evidence of the monuments," says Poole, "is neither full nor explicit." "Chronology," says Baron Bunsen,* "cannot be elicited from them." "The greatest obstacle," says Mariette,† "to the establishment of a regular Egyptian chronology is the circumstance that the Egyptians themselves *never had any chronology at all.*"

The materials for Egyptian chronology are the "monuments" and the remains of the historical work of Manetho, an Egyptian priest under the Ptolemies, who wrote in Greek about B.C. 280–250. His information professed to be derived from the archives of the Egyptian temples. The original is lost, and we possess only certain abstracts preserved by Eusebius‡ and

or even the Mosaic era of the creation." (Wilkinson, *Manners and Customs of the Ancient Egyptians, etc.*, 1st Ser., 1837–41, I, pp. 5–11; II, pp. 105–121.) "Strong reasons are given by Mr. Stuart Poole for fixing the date of his [Menes'] accession at B.C. 2717 (*Horæ Ægyptiacæ*, pp. 94–98); but even this date must be somewhat lowered, *as it would precede that of the Flood* (B.C. 2515)." (McClintock & Strong's *Cyclopædia*, Vol. III, p. 96. See also *Ib.*, p. 91, and Strong, *Methodist Quarterly Review*, April, 1878, p. 197.)

* Bunsen, *Egypt's Place in Universal History*, I, p. 32.

† In Lenormant, *Histoire ancienne de l'Orient*, Vol. I, p. 322; Am. ed. I, p. 198.

‡ Eusebius, *Chronicon, Can.*, I, 20. Supposed based directly on a recension of Manetho's Αιγυπτιακα by Julius Africanus. Latin and Armenian versions still exist. See J. J. Scaliger's *Eusebii Pamphili*

Syncellus,* and a few excerpts contained in the writings of Josephus.† The Egyptian chronology of Herodotus is perhaps an independent compilation. Manetho appears to have enumerated thirty-one dynasties of Egyptian kings down to the Alexandrian conquest. Eleven of them belonged to the Old Empire; six to the Middle Empire, and fourteen to the New Empire. The duration of each dynasty is stated, and the impression is given that all the dynasties were consecutive. This arrangement would cause them to cover a period ranging, according to the different authorities for the Manethonian numbers, from 5,040 to 5,358 years,—that is, a period stretching back to 5372 B.C. or 5678 B.C. But, according to Syncellus, Manetho made the whole period covered by these Egyptian dynasties fall within 3,555 years. This discrepancy may be explained by assuming that certain of the dynasties were contemporaneous. Other indications exist that they should be so considered. A fragment from Manetho, preserved by Josephus, speaks of the "Kings of the Thebaïd and of the rest of Egypt" rising against the "Shepherds." Poole asserts positively that 'kings who unquestionably belong to different dynasties are shown by them [the monuments] to be contemporary.‡ Strong summarizes several evidences of this kind.§ The general consecutive arrangement of the dynasties

Chronicorum Canonum omnimodæ historiæ libri duo, in Thesaurus Temporum, 1606.

* Syncellus, *Chronograph*, p. 55–78. This is regarded only as a recension of the dilapidated work of Eusebius.

† Josephus, *Contra Apionem*, i, 14, 15, 26. See an account of Manetho by Prof. James Strong, *Methodist Quarterly Review*, April 1878.

‡ Smith, *Dictionary of the Bible*, Vol. 1, p. 507, col. 1.

§ Strong, "Egyptian Chronology," in *Methodist Quarterly Review*, July, 1878, p. 464.

was accepted until modern times, though a method of condensation began as early as the third and second centuries before Christ, under the Ptolemies, at the hands of Eratosthenes and Apollodorus. Most Egyptologists are now disposed to admit the principle of parallelisms among them. Mariette is said by Canon Rawlinson to be the only living investigator of the original documents who holds to the consecutive arrangement.* The diversity of results arises from divergent views respecting the extent to which different dynasties are to be regarded as contemporaneous.

A good deal of light has been thrown upon Manetho's table by the "monuments" — tablets, papyri, genealogical lists and stelæ.† The principal aids of

*Canon Rawlinson, *Origin of Nations*, p. 25. Mariette says: "There were undoubtedly dynasties in Egypt which reigned simultaneously; but Manetho has rejected them, and has admitted none but those reckoned legitimate; the secondary dynasties are no longer in his lists." Again: "There is superabundant monumental proof collected by Egyptologers to show that *all the royal races* enumerated by the priest of Sebennytus [Manetho] *occupied the throne one after the other*." (Quoted by Lenormant, *Histoire ancienne de l'Orient*, Vol. I, pp. 323, 324, Am. ed., Vol. I, p. 198–9.)

† For a brief account of these, see Strong, in *Methodist Quarterly Review*, April, 1878, p. 198 *et seq.* See, also, the Cyclopædias, and Lenormant, *Ancient History of the East*, Am. ed., pp. 199–201. Some of the most important original works are the following: Champollion le jeune, *Monuments*, Paris, 1829–1847; Lepsius, *Denkmäler*, Leipzig, 1849 *et seq.*, and *Chronologie der Ægypter*, Leipzig, 1849; Rosellini, *Monumenti*, Pisa, 1832–44; Brugsch, *Recueil de Monuments Egyptiens*, Paris, 1862–3, and *Histoire d'Egypte*, Paris, 1869 *et seq.*; Bunsen, *Egypt's Place in Universal History* (trans.), London, 1850–9; Herodotus (ed. Rawlinson, Vols. I–III, London and New York, 1861); Poole, *Horæ Ægyptiacæ*, London, 1851; Kenrick, *Egypt under the Pharaohs*, London and New York, 1852; Unger, *Chronologie des Manetho*, Berlin, 1867. A convenient compendium is Samuel Sharpe's *History of Egypt from the Earliest Times till the Conquest by the Arabs, A. D. 640*, 2 vols., London, 1876 (6th ed.).

this class are the following: 1. The "*Turin Papyrus*," a roll at present in the Turin Museum, containing a list of the Egyptian kings from the first (Menes) down to the close of the Fifteenth Dynasty. Dr. Strong says: "It is literally composed of innumerable fragments of all shapes and sizes, with numerous gaps between them and abrasions on the edges." This document was put together by Seyffarth, a German scholar, in accordance with principles of decipherment which have not received the unanimous sanction of hierologists,* though Lepsius and Bunsen have given the arrangement their unequivocal endorsement, and Wilkinson edited the document in 1840. 2. The "*Tablet of Abydos*," from a temple in upper Egypt, containing originally a list of fifty kings (twenty of which, however, are lost), copied, apparently, from the next named tablet. This is in the British Museum. 3. The "*New Tablet of Abydos*" —new, because more recently discovered, though it seems to be the original of the preceding, and supplies nearly all its vacancies. It is carved on the walls of one of the subterranean passage-ways in the temple called Memnonium, at Abydos (This), in upper Egypt. It contains the names of seventy-seven kings of the first nineteen dynasties. 4. The "*Tablet of Sakkárah*," found in the mortuary chapel of a priest at Sakkarah, in lower Egypt, contains the names of fifty-eight kings. It forms a part of the Khedive's collection at Cairo. 5. The "*Tablet of Karnak*," found in the Hall of Ancestors, at Karnak, now in Paris, contains, in an interrupted series, the names of sixty-one predecessors of Thotmes III. 6. Detached "*Stelæ*," or inscriptions containing the names and line-

* Osburn, *Monumental History of Egypt*, Vol. I, p. 227; Vol. II, pp. 124, 125.

ages of royal or sacred personages. More than five hundred of such inscriptions have been removed to the Louvre, in Paris.

Comparing these imperfect sources of information together, Egyptologists have variously decided to what extent the system of parallelisms shall be admitted in the Egyptian dynasties. Sir Gardner Wilkinson and Canon Rawlinson have given their approval to Poole's arrangement, which brings the "Era of Menes" at 2717 B.C. Dr. Strong has thought it desirable to condense still further, so as to bring the Era of Menes at 2417 B.C., which, according to his chronology, is ninety-eight years after the Flood. Lepsius and Bunsen are generally regarded the ablest of the long chronologers. Lepsius puts the Era of Menes at 3892 B.C., and Bunsen at 3623 B.C., and more recently at 3059 B.C., which is only six hundred and forty-two years farther back than Strong's determination,—an interval which, as I have indicated, is far within the chances of error in the determination of the epoch of the Flood.

Lenormant regards the Eleventh Dynasty as contemporaneous with the Ninth and Tenth, and the Fourteenth as contemporary with the Thirteenth.

Brugsch makes the Ninth and Tenth contemporary with the Eighth and Eleventh; the Fourteenth with the Thirteenth; the Seventeenth with the Fifteenth, Sixteenth and part of the Eighteenth, and the Twenty-fifth with the end of the Fourteenth and the beginning of the Twenty-sixth.

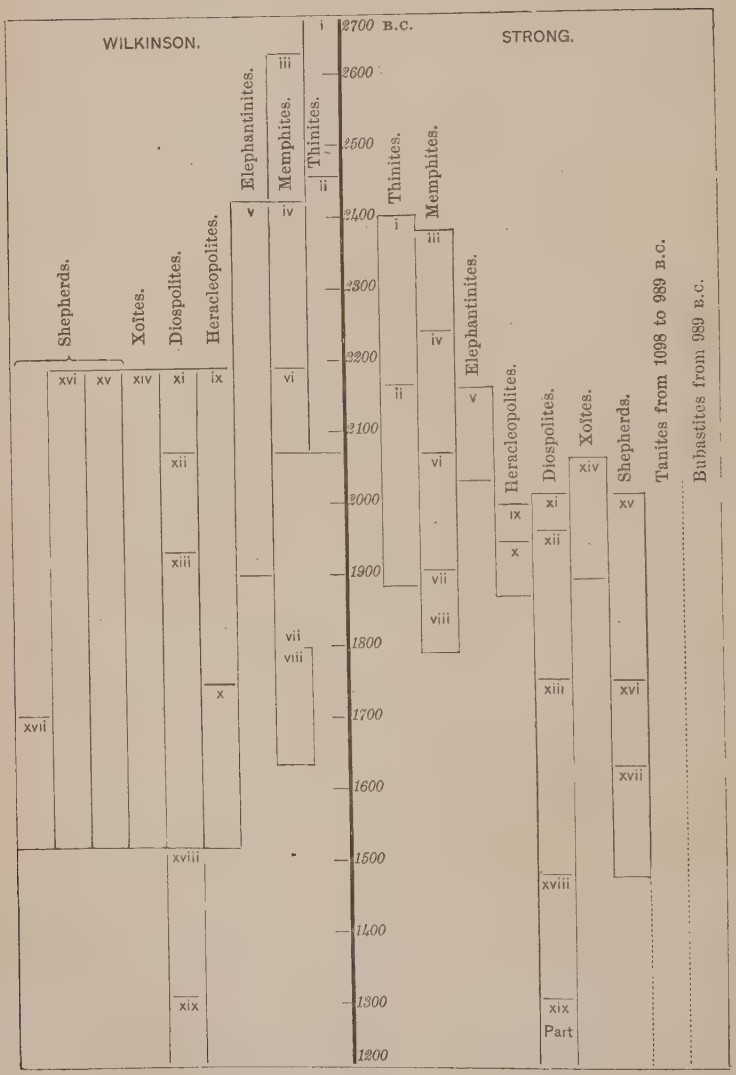
Bunsen goes a step farther, placing the Second, Fifth, Ninth, Tenth, Fourteenth, Sixteenth and Seventeenth in the list of collateral dynasties, regarding them as parallel with the Third, Sixth, Eighth and Fifteenth.

Poole, followed by Wilkinson, makes the Third Dynasty contemporaneous with the First; the Second with the Sixth; the Ninth, Tenth and Eleventh with the Sixth; the Twelfth and Thirteenth (at Thebes), the Fourteenth (at Xoïs), and the three Shepherd dynasties — the Fifteenth, Sixteenth and Seventeenth — with the Seventh and Eighth (at Memphis).

A comparative diagram is here presented, showing a system of dynastic parallelism announced by Wilkinson,* and, by its side, a late conclusion published by Dr. James Strong.

* Wilkinson, *The Fragments of the Hieratic Papyrus at Turin.* Respecting this table Wilkinson says: "The relative positions, and the lengths of most of these dynasties, are founded upon some kind of monumental authority. The rest I placed within approximate extremes. There are several points of exact contemporaneousness, as in the Second and Fourth and Fifth Dynasties; again, in the Fifth and Fifteenth, and in the Ninth and Eleventh; and these, with other evidences of the same nature, enable us to adjust the general scheme of all the dynasties." (*Hieratic Papyrus*, pp. 30, 31.) Dr. Strong says of his table: "The principal difference between our scheme and that of Poole [which Wilkinson substantially adopts] is in the neglecting of the Sothic dates, to which he arbitrarily [?] adapts his whole chronology." (Strong, "Egyptian Chronology," in *Methodist Quarterly Review*, July, 1878, p. 468.)

EGYPTIAN DYNASTIES PARALLELIZED.



The various dates thus arrived at for the "Era of Menes" may now be exhibited in the following table:

THE ERA OF MENES.	B.C.
Champollion-Figeac (1840),	5867
Lesueur (1848),	5773
Böckh (1845),	5702
Unger,	5613
Henry (1846),	5305
Mariette and Lenormant (1871),	5004
Lenormant (1839),	4915
Barucchi (1845),	4890
Brugsch (1859),	4455
Brugsch (1875), Pickering (1854),	4400
Hincks (1851),	3895
Lepsius (1849), Kenrick (1851),	3892
Bunsen (early view, 1845),	3643
Bunsen (later view),	3059
Birch,	3000
Uhlemann and Seyffarth,	2781
Poole,	2718
Wilkinson,	2691
Strong (1878),	2515

The highest estimates have been generally abandoned. The result obtained by Mariette — 5004 B.C. — is the highest remaining under discussion. Between Mariette and Strong is a difference of 2489 years. The figures of Lepsius and Bunsen occupy a mean between the resulting extremes. Lepsius fixes the Era of Menes 1112 years later than Mariette, and 1377 years earlier than Strong. Bunsen's later view fixes that era 1945 years later than Mariette and 544 years earlier than Strong. With such contradictions, it would be dogmatism for a hierological layman to fix permanently on any particular date. According to the

maxim that safety lies between extremes,* I should feel inclined to side with Lepsius and Bunsen. It is no light thing to set aside conclusions based on researches so extensive as those of Lepsius. As early as 1834 Richard Lepsius had gained a prize essay that placed him in the front of linguistic scholarship. In 1842 he was commissioned by Frederic IV, of Prussia, to represent German scholarship in the prosecution of researches in the valley of the Nile. He was accompanied by a staff of eight coadjutors. By May, 1843, he announced the discovery of the sites of thirty pyramids previously unknown. All belonged, moreover, to the ancient kingdom of Egypt, *before* the irruption of the Hyksos or Shepherd Kings (about 2000 B.C.). He prosecuted his labors till the history of sixty-seven pyramids and one hundred and thirty private tombs had been made out, reaching back to the fourth chiliad before Christ. The Prussians then proceeded up the river, exploring every foot of ground, as far as Soba, on the Blue Nile, and Sennâr, to the thirteenth degree of north latitude. While his assistants continued subsequently their labors among the ruins of Thebes, Lepsius explored the Sinaitic peninsula, accumulating records belonging between the Fourth and Twelfth Dynasties. Returning to Thebes, he left it again to extend his researches over the land of Goshen and much of Palestine, and finally returned to Berlin, after an absence of three years. The remainder of his life has been devoted to working out results from the vast accumulation of material which rewarded the expedition.

Efforts have been made to check the historical and monumental results by a determination of the maximum age of the delta on which Egyptian civilization

* *In medio tutissimus ibis.* (Virg. Æneid.)

was reared. Girard, in 1799, began such an investigation, but it was interrupted by warlike operations then in progress. Geological estimates had fixed roughly on seven thousand years as a minimum antiquity for the Nilotic delta. More recent investigations, however, have brought out a more reliable result. The annual inundation of the Nile deposits a sediment ascertained to amount to .4134 of a foot per century. Numerous excavations, made in various parts of the delta, show that the Nilotic deposit nowhere exceeds 26.25 feet in depth.* Beneath this is found everywhere a bed of sea-sand which is still saturated with salt water.† Now the ascertained rate of deposit shows that about 6350 years have been occupied in the formation of the delta. This, supposing the data of the calculation quite reliable, may be set down as a maximum antiquity, which the first settlement upon the delta of Egypt cannot have surpassed. It carries us back to B.C. 4500.‡ It is not, of course, known what was the condition of the delta when first reached by the posterity of Adam. Herodotus, however, tells us that in the time of Menes, the first king, the valley of the Nile was a swamp below Thebes;§ and he expresses the opinion that "the country above Memphis seems formerly to have been an arm of the sea."‖ The first empire seems to have been established at This, not very far below Thebes; but the Third Dynasty set up rule at Memphis, at a date not much later; so that

* De Lanoye, *Ramsès le Grand, ou l'Egypte il y a 3300 ans.* Amer. trans., *Rameses the Great*, New York, 1870, pp. 30, 31.

† Klunzinger, *Upper Egypt*, p. 136.

‡ Le Hon puts the age of the delta at 5000 to 6000 B.C., and states that independent researches of Sebas and Wilkinson guide to the same result. Le Hon, *L'Homme fossile*, p. 263.

§ Herodotus, *History*, Book ii, § 4. ‖ *Ib.*, ii, § 10.

desiccation of the delta must have been completed as far as Memphis at an epoch not far removed from the establishment of kingly rule in Egypt. If, then, the commencement of the delta reaches back only to 4500 B.C., I could hardly discover ground for carrying back the Era of Menes beyond the date assigned by Lepsius, 3892 B.C.

From two considerations not yet mentioned it would seem that Mizraitic occupation of the valley of the Nile must be allowed as high an antiquity as the geological conditions permit. At the epoch of Menes the Egyptians were already a civilized and numerous people. Manetho says that Athothis, the son of Menes, built the palace at Memphis; that he was a physician, and left anatomical books. "All these statements imply that, even at this early period, the Egyptians were in a high state of civilization."* "In the time of Menes," states another authority, "the Egyptians had long been architects, sculptors, painters, mythologists and theologians." Of the same opinion is Prof. Richard Owen: "Egypt is recorded to have been a civilized and governed community *before* the time of Menes. . . . The pastoral community of a group of nomad families, as portrayed in the Pentateuch, may be admitted as an early step in civilization. But how far in advance of this stage is a nation administered by a kingly government, consisting of grades of society, with divisions of labor, of which one kind, assigned to the priesthood, was to record or chronicle the names and dynasties of the kings, the durations and chief events of their reigns!

"The traditions of the priestly historians, as received and recorded by Herodotus and Diodorus, refer to a long antecedent period of the existence of the

* McClintock and Strong, *Cyclopædia*, Vol. III, p. 96, 2d col.

Egyptians as an administered community; the final phase of which, prior to the assumption of the crown by Menes, was analogous to that of the Judges in Israel, or the Papacy at Rome, a government mainly by priests."*

There is something of a basis here on which we may form a general estimate of the duration of Egyptian history before Menes. What period has been required by other nationalities for the elements of regular government to organize themselves? The Jews, from the time of Abraham, 2164 B.C. (Strong), to Othniel, the first of the Judges, 1575 B.C., a period of 589 years, were nomadic, without settled government, and decidedly barbaric in their culture, though they had been 216 years in contact with the civilization of the Fourteenth, Fifteenth, Sixteenth, Seventeenth and Eighteenth Dynasties of Egypt. They can hardly be said to have attained a definite form of government before the accession of Saul, 482 years later. That is, the Jews required over a thousand years to develop an organized monarchy. The rise of Babylonian monarchy, according to Sir Henry Rawlinson, dates from 2234 B.C. If, according to Strong, the end of the Flood dated from 2515 B.C., this nation had only 281 years of nomadic existence; but the date of the Flood

* Prof. Richard Owen, in *Leisure Hour* for May, 1876, reprinted in Rawlinson's *Origin of Nations*, Appendix, p. 261. See also Owen's Address before the "International Congress of Orientalists," on *Man's Early History*, September 20, 1874, reprinted in the New York "Tribune Extra," November 23. Compare also the Address of Sir John Hawkshaw, before the British Association, Bristol, 1875. Menes, nevertheless, is by many identified with the Indian Menu, and Sharpe, accordingly, affirms that he "was not wholly withdrawn from the region of fable." (*Hist. of Egypt*, i, p. 10.) The certain monuments, however, of the early dynasties show that Menes was not far removed from actual terrestrial events.

is extremely uncertain. We have no means of ascertaining the duration of the nomadic state of the Lydians, Medes or other peoples of the ancient world. It is not likely, however, that their advancement was more rapid than that of the Jews. The Kelts, an Aryan nationality, made their appearance in the north of Italy about 650 B.C.; but for centuries before this they had wandered as barbarous hordes from the east of Europe to Gaul and the Iberian peninsula, and back to Gaul. The Thracians, from whom they diverged, were in Attica as early as 2000 B.C., and it can hardly be doubted that the Kelts had a separate existence as early as 1500 B.C. They were still barbarous in the time of Cæsar, 50 B.C. It would be entirely safe to assume that they spent a thousand years in a nomadic and barbarous condition. The Germans were known as pastoral and agricultural tribes in the time of Cæsar, and had probably existed already some hundreds of years since the date of their differentiation from the Thracian or from the older Kimmerian stock. They did not attain to a generally organized system of government till the time of Clovis, 481 A.D. In the light of such facts, it should not surprise us to learn that the Egyptians had lived a pastoral and more or less wandering life for a thousand years before the Era of Menes. This is the more probable since, at that age of the world, the seeds of civilization had not yet been developed in contiguous nations, to be disseminated by commerce and even by wars. If, then, we assume Lepsius' date, 3892 B.C., for the Era of Menes, the epoch of the separate existence of the Egyptian people might mount to 4892 B.C., which is 400 years before the earliest deposits in the Nilotic delta. Upper Egypt, however, was even then ready to receive its Adamite population.

An important fact in this connection is the admission of women to the throne, as early as the reign of the third king of the Second Dynasty, or about 376 years after the Era of Menes.* Such an exaltation of woman, as even Sharpe admits, implies a long antecedent monarchical and tribal existence. "The country," he says, speaking of a Theban queen, "must have been long governed by monarchs before the custom of hereditary succession could have been so well established as to allow the crown to be worn by a woman. It is only in a settled state of society that the strong give way to the weak. Men would not form a monarchy [of any kind] in a very early stage. They must have united together and resisted the usurpations of the strong, and felt the evils of anarchy, before agreeing to obey a king. And again, law must, for many generations, have gained the mastery over violence, before the peaceable regularity of the *hereditary* monarch could have been preferred to the turbulent vigor of the *elected* chief."† Such reflections seem little compatible with the same author's opinion that Menes could hardly have been withdrawn from "the region of fable."

The other consideration to which I alluded concerns the Sothic period of 1461 years. This is measured by the synchronous risings of the Dog-star and the sun on the first day of the Egyptian year. We have a heliacal rising of the star in the first *thoth* or month of the year, recorded in Egypt, which is shown by astronomical calculations to have occurred at 1322 B.C. The period or Sothis ending at that date, began 2783 B.C. It is reasonable to suppose that the Egyp-

* S. Birch, *Egypt from the Earliest Times*, pp. 26–7

† Sharpe, *History of Egypt*, i, 28–9.

tian observers, to learn the length of the period, must have been consummate astronomers — which they were not — or must have continued their observations from the date of the preceding conjunction, 4244 B.C. Another astronomical period noted in connection with Egyptian history is that of the "reappearance of the Phœnix." This, according to Tacitus, was also 1461 years; and Tacitus mentions three appearances, connecting with them the names of three Egyptian sovereigns.* Astronomical data thus carry us back into recognized antediluvial times; and Dr. Strong thinks that "nothing satisfactory results."

A few statements regarding the general tenor of Egyptian history will suffice for the present. It is only needful to indicate a chronological and historical scale to which we may hereafter refer important facts connected with Egyptian ethnology. Of the First, Second and Third Dynasties we know little more than the names of the kings. During the Second it was determined that women could hold the sovereign power. The pyramid of Meydoum belongs to this dynasty; and some architecture of the period is quite similar to that of the Fourth Dynasty. At Meydoum were found two statues having a European cast of features. Serbes of the Third Dynasty was celebrated for his "knowledge or patronage of the medical art, and is stated to have invented the art of building with polished stones, and also to have given attention to the making of inscriptions or writings." † Of the Fourth Dynasty, the surviving vestiges astonish us. To this belong the most famous pyramids. "On these wondrous monuments we find traces, at that remote period,

* See further, Poole, in Smith's *Dictionary of the Bible*, I, p. 506, and *Horæ Ægyptiacæ*, p. 12 *et seq.*, Pt. 1, Nos. 5, 6.

† Birch, *Egypt from the Earliest Times*, p. 30.

of the advanced state of civilization of later ages. The cursive character scrawled on the stones by the masons proves that writing had been long in common use. Many of the blocks brought from Syene are built together in the pyramids of Gizeh in a manner unrivaled at any period. The same manners and customs are portrayed on them as on the later monuments. The same boats are used, the same costume of the priests, the same trades, such as glass-blowing and cabinet-making." The copper mines of the peninsula of Sinai were worked at the beginning of the Fourth Dynasty.*

Prof. Richard Owen, speaking of the civilization of the Fourth Dynasty, says: "Unprepossessed and sober experience teaches that arts, language, literature, are of slow growth, the results of gradual development, as would be expected, in a civilization which had culminated in a creed, a ritual, a priesthood, in convictions of a future life and judgment, of the 'resurrection of *the* body,' with the resulting instinct of its preservation,—an instinct in which kings alone could indulge to the height of a pyramid. The administrative arrangements through which compulsory labors could be regulated and carried on, with more consideration than Mohamed Ali gave or cared for, in the construction of the Mahmoudi canal; the monthly relays of Pharaoh's workmen; the commissariat as it was recorded on the original polished exterior of the Great Pyramid; the settled grades of Egyptian society, and the 'Thirty Commandments' governing their moral life,—'commandments' by the people held to be 'divine,' seeing that thereby the soul was tested and the deeds of the flesh weighed before the judgment-seat of Osiris;—these are not the signs of an incipient civilization."

* McClintock and Strong, *Cyclopædia*, III, p. 96.

The Fifth Dynasty receives much light from the Turin papyrus; and all its kings, except one, have been recovered from the tombs through the labors of the Prussian commission. The oldest extant hieratic papyrus is of this age—the "Prisse papyrus"—and abounds in moral precepts reminding one of the "Wisdom of Solomon." The Sixth Dynasty has been tolerably well revealed. Of the Seventh, Eighth, Ninth, Tenth and Eleventh little is known. The Twelfth has yielded much more information, thanks to the labors of Lepsius. It is marked architecturally by the employment of obelisks. The Thirteenth and Fourteenth still remain in the mist. We come now to the Middle Empire, or reign of the Shepherd Kings, covering the Fifteenth, Sixteenth and Seventeenth Dynasties. They afford very few monuments. The Manethonian period of 511 years is supposed to cover the sojourn of the Israelites in Egypt. The Shepherds were foreign dynasties, and the tendency of opinion is to regard them as Phœnician.*

With the Eighteenth Dynasty, and the beginning of the New Empire, we strike solid chronological ground. This is generally admitted to mark the epoch of about 1500 B.C.† To this dynasty belong Amosis, Thotmes I, II and III, and Amunoph I, II and III. Now first appears the domestic horse. Amunoph I made con-

*Prof. Richard Owen states: "When finally driven out, they were pursued by the victorious Amosis as far as Palestine, as that pregnant cotemporary record translated by M. Chabas teaches." (Address on *Man's Earliest History*, Tribune ed., p. 29.) Dr. McCausland states: "There is cogent and persuasive evidence that they passed eastward to the Euphrates valley, through India and Cochin China, to the western shores of the American continent." (McCausland, *Adam and the Adamite*, p. 226.)

†The date is placed by S. Birch at 1600 B.C. (*Egypt from the Monuments*, p. 81.)

quests in Ethiopia and Asia. In his time the Egyptians had adopted the five intercalary days. True arches bearing his name on the bricks have been found at Thebes. Under Thotmes I the conquests of Egypt were extended to Mesopotamia and Lybia. Thotmes III (Sesostris) carried his arms as far as the confines of India, and perhaps reduced Babylon. He exacted tribute from northern Syria, Armenia, Mesopotamia and Phœnicia. Rich trophies were brought back also from the conquest of southern nations. This was the meridian of Egyptian art. The name of Thotmes IV is borne by the Sphinx at the pyramids. Amenhept II made conquest of the city of Nineveh.

There is evidence that during this dynasty the Egyptian race became somewhat mixed, especially the royal line. Large numbers of prisoners were repeatedly introduced, both from the north and the south. Aahmes (Amosis) married a *Kushite* ("Ethiopian") wife, who, after his death, reigned as queen Aahmes-Nefertari, said by Birch to have been a "Negress," though Birch does not discriminate between "black and copper-colored Negroes."* Amenhept III (Amenophis) reduced great numbers of Negroes (*Nahsu*) to slavery. They were enumerated as so many "head," a sign of contempt, which indicates that the queen of Aahmes had *not* been a "Negress." The queen Tii is painted in pink, or flesh-color, and was undoubtedly Aryan. During the Nineteenth Dynasty similar processes were going on, and thousands of prisoners were introduced from Libya, among them some Achaian allies. The effect of these intermixtures is perceived in the portraits of the sovereigns, and must have been similarly shown in a modified ethnic cast of the people.

* S. Birch, *Egypt from the Monuments*, p. 116.

To the Nineteenth Dynasty belong Rameses I, II and III. Rameses II is otherwise known as "Rameses the Great." "If he did not exceed all others in foreign conquests, he far outshone them in the grandeur and beauty of the temples with which he adorned Egypt and Nubia."

No other oriental nation of the Mediterranean race has been conceded a monumental antiquity equal to that of the Egyptians. A search for their chronologies would, therefore, throw no additional light on the question of the amount of time at our disposal for an explanation of the racial divergences of mankind. The Cushite or Accadian Dynasty of Babylon, however, had run its career previous to 2500 B.C. I shall content myself, therefore, with presenting a table embodying the final results of chronological investigations:

	G. Rawlinson.
Date of the Deluge, according to the Septuagint [Strong 2515],	B.C. 3200
Rise of monarchy in Egypt [Lepsius 3892, Strong 2417],	2450
Rise of monarchy in Babylon [Median Dynasty 2500, Lenorm.],	2300
Earliest traces of civilization in Asia Minor,	2000
Rise of Phœnicia,	1550
Rise of Assyria [*Ismi-Dagon*, first king of Assyria, placed by George Smith at 1850–1820],	1500
Earliest Iranic civilization [Zendavesta],	1500
Earliest Indic civilization [Vedas],	1200
Earliest Hellenic civilization [Homer],	1200
Phrygian and Lydian civilizations commence,	900
Etruscan civilization commences [according to d'Arbois de Jubainville, 992 to 974. See *ante*, chapters iii, v,	650
Lycian civilization commences,	600

The records of the Chinese attain an antiquity perhaps exceeding that of Egypt. Fu-hi is the Menes of China. He was the head of a prehistoric dynasty of "five sovereigns," whose united reigns covered a space, according to Dr. Williams, the Sinologist, of 647 years; according to Prof. Kidd, of 1164 years. The exact epoch of Fu-hi's accession is, of course, not known, but it is estimated at 3000 to 3468 B.C. Some traditions make his era vastly more remote.* Chronology

* Tradition recounts older dynasties than that of Fu-hi, which, like the Manethonian reigns of gods and heroes, signify for us only the ignorance, conjecture and fancy which hover over the beginnings of national existence. It is interesting to note that the traditions of nearly all oriental countries trace their national descent back through fabulous myriads of years to a divine ancestry. According to Manetho, as reported by Eusebius (*Chronicon*, I, 20, pp. 93–107, ed. Mai.), the Egyptian tradition was as follows:

	Years.
Reign of gods,	13,900
Reign of heroes,	1,255
Reign of kings,	1,817
Reign of thirty Memphite kings,	1,790
Reign of ten Thinite kings,	350
Reign of manes and heroes,	5,813
	24,925
Thirty dynasties of kings, beginning with Menes: Syncellus 5,040, Armenian version 5,207, Africanus,	5,385
Total,	30,310

Chaldæan traditions, according to the scheme of Berosus, reported by Eusebius (*Chronicon*, I, 1 and 4, pp. 5, 18), were as follows:

	Years.
Ten kings from Alorus to Xisuthrus reigned,	432,000
Eighty-six kings from Xisuthrus to the Medean conquest,	33,080
Eight Medean kings,	224
Eleven kings (a number regarded doubtful, perhaps should be 258 years),	(?) 48
Forty-nine Chaldæan kings,	458
Nine Arabian kings,	245
Forty-five kings down to Pul,	526
Total,	466,581

begins at 2637 B.C., with Hoang-ti. The sixth king of this dynasty was Yao, whose 81st year answers to 2277 B.C.; the eighth was Chun. At 2278 B.C. the monuments begin, with the inscription of Yu. In the Second Dynasty, "Hia," Yu the Great was the first king, at 2205 B.C.; Tchung-kang was the fourth, whose fifth year is fixed by an eclipse of the sun at 2155 B.C. Then follow the dynasties and kings in succession.*

According to the conclusion of Prichard, who gave a candid investigation to this subject, "there is a nearly uniform consent among the best informed students of Chinese literature favorable to the authenticity of Chinese history as far back as twenty-two or twenty-three centuries before the Christian Era."† Legge alone dis-

The Chinese are reported to possess a scheme represented by the following table (Crawford, *Patriarchal Dynasties*, pp. 126, 128–130):

	Years.
Pwang-koo, the first man,	18,000
Tien-wong, the King of Heaven,	18,000
Te-wong, the King of the World,	18,000
Jin-wong, King of Men,	45,000
Fu-hi [Williams 647], Kidd,	1,164
Twenty-five historical dynasties,	4,017
Total,	104,181

The ancient Brahmans, as has been aptly observed, made out their primitive chronology by adding a zero to the Babylonian dates; for while the latter assign 432,000 years to the first cycle, the Hindoos make it 4,320,000 years.

The Phœnicians, according to Sanchoniathon, as reported by Philo of Byblos, pretended that the learning of Egypt, Greece and Judæa was derived from Phœnicia. Similar claims to autochthonous origin, and descent from the remotest antiquity, have been put forth by Phrygia, Lydia and other countries.

* This information was communicated by Father Amiot in 1769, and embodied in Pauthier's *Chine*. The earliest history of China is more recently summarized by Richthofen in his magnificent work on "*China*," particularly 2tes Absch., 9tes cap., pp. 365–95.

† Prichard, *Physical History of Mankind*, Vol. IV, p. 477.

sents from such a conclusion.* Neumann recognizes valid Chinese chronology as far back as 2257 B.C.† Remusat assures us that we can trust these records as far as the twenty-second century B.C., and that clear traditions carry us back four centuries farther, to 2637 B.C.‡ Richthofen thinks it probable the annals of the *Yü-kung* attain to 2357 B.C.§ At a time still more remote a wild and savage race spread over the country, the relics of which still survive, as Miaotse (sprouts), in the remote fastnesses of the southern mountains.

* Legge, *Shoo-king, prolegomena*, pp. 3–6.
† Neumann, *Coup d'œil Hist. Nouv. Jour. Asiat.*, tome xiv, p. 50.
‡ Remusat, *Mélanges Historiques*, tome i, p. 66.
§ Richthofen, *China*, p. 277.

CHAPTER X.

PRENOACHITE RACES.

HAD the language of the Pentateuch clearly stated the existence of nations which survived the Flood, collateral interpretations and current opinions would have adjusted themselves immediately to such an enunciation. I have no doubt a similar adjustment would have been effected had the world always known of the existence of nations unaffected by the Flood, even though the language of Scripture had been as it is. It does not appear that biblical language excludes the existence of such nations; though many passages seem to imply their existence. There is, however, some ground to suppose that the compiler of Genesis had no intention to make mention of postdiluvian peoples not belonging to the line of the Noachidæ, if, indeed, he had actual information of the existence of such peoples. At any rate, it is generally understood that the Pentateuch formally restricts itself to the Adamic ancestry of Noah and the nations descended from him, among whom its specialty is the Semitic family. In the purview of Genesis, "all the world" is the region over which the Semitic people were dispersed — or, in the widest sense, it stretched no farther than the tribes of Gomer on the north, Madai on the east, Seba on the south and the posterity of Mizraim on the west. With such a purpose, and the silence which such a purpose imposed, the later Jews undoubtedly came to believe literally that all the races of men had descended

from Noah. They fixed upon the Scriptures an interpretation accordant with such a belief, and their interpretation and belief have come into our possession. But it is always legitimate to reëxamine any matter of opinion and judgment. Whenever new light dawns upon any subject, it is our solemn duty to scrutinize the grounds of old opinions, and cheerfully to abandon them if not in harmony with new facts, or the inductions logically based on new facts. For such reasons I propose to reëxamine the old belief respecting the descent of all men from Noah. The invalidity of this belief must be shown before we can consistently proceed to the question of the descent of all men from Adam.

Let us first consider some of the implications of the Sacred Scripture. Abraham, following Strong's chronology, had found his way into Egypt 445 years after the Flood. Within that period the Mizraimites had wandered into Africa, developed society, arts, literature, religion and a fixed monarchical form of government. Abraham found there a Pharaoh on the throne, surrounded by his "princes." Within that period the posterity of Noah had journeyed westward to Shinar, and built "a city and a tower"; and the dialects of men had become so divergent, either as cause or consequence of a wide dispersion, that different nations no longer understood each other's speech. Within that time the other great cities of Mesopotamia — Erech, Accad, Calneh and Ur — had been built; and from Ur, Terah, with Abraham and his nephew Lot, went into the land of Canaan. "The Canaanite and the Perizzite" descendants of Ham had already spread over the country, and the "cities of the plain" had been built up. Soon afterward, great warlike expeditions were on foot. "In the days of Amraphel, king of Shinar, Arioch, king of Ellasar, Chedorlaomer, king of Elam,

and Tidal, *king of nations*," confederated together to subjugate the cities of Sodom, Gomorrah, Admah, Zeboïm and Bela; and a great battle was fought in the vale of Siddim. Had all these nations, these governments and these cities, extending from the Persian Gulf to the Nile, come into existence in the space of 445 years?—or was there, more probably, an older stratum of population already dwelling in cities, and already organized into nationalities and governments?* Have we any historical record of an increase and dispersion of populations at all comparable? The nine mutineers of the ship Bounty, who, with nine Tahitian women, settled, in 1789, on Pitcairn's Island, had increased in thirty-six years to seventy persons, and in seventy years to two hundred and nineteen persons. The original stock was, in this case, three times as numerous as the family of Noah. At the same rate of increase, the Noachidæ would have numbered seventy-three persons in seventy years. The Parsees fled from their country during the seventh century. Those who

* Mr. R. S. Poole, considering this question, says: "A comparison of all the passages [of Scripture] referring to the primitive history of Palestine and Idumæa, shows that there *was an earlier population* expelled by the Hamite and Abrahamite settlers. This population was important in the war of Chedorlaomer; but at the exodus there was but a remnant of it." (Smith's *Dictionary of the Bible*, I, 743, 1st col.) I have been disposed to think the very expression "king of nations" signifies that Tidal (Thargal in the *Septuagint*) belonged outside of the recognized and enumerated peoples of biblical history. The use of the word GOIM, *nations*, denotes as much. It is a plural used especially of "nations other than Israel, foreign nations"; often with the "accessory notion of *hostile* and *barbarous*." Gesenius admits: "It is uncertain where the GOIM are to be sought who joined in the war against Sodom." (Hebrew Lexicon, *sub voce*.) The name Tidal, or Thargal, is, moreover, a Turanian word, signifying "great chief." "The nations over whom he ruled," says Lenormant, "were probably nomadic tribes of Scythians or Turanians." (*Ancient History of the East*, Am. ed., I, 352.)

settled in the Caucasus have become almost extinct; those who went to Bombay are said to have prospered; but in 1,200 years they have increased to only 49,000 souls. Racial and national changes have proceeded, in the ordinary history of the world, with the utmost slowness. "So far as history teaches us," says Huxley, "the populations of Europe, Asia and Africa were, twenty centuries ago, just what they are now, in their broad features and general distribution." Again, "The Xanthochroi and Melanochroi of Great Britain are, speaking broadly, distributed at present as they were in the time of Tacitus; and their representatives on the continent of Europe have the same general distribution as at the earliest period of which we have any record."*

Again, we are told in Genesis x, 12, that Nimrod — or the Nimrodites, the immediate descendants of Ham, were concerned, in some way, in building famous cities in the land of Shinar. "The beginning of his kingdom was Babel and Erech and Accad and Calneh." Is it supposable that Nimrod built these four cities without a preëxisting population? Asshur, also, a son of Shem, migrated from the land of Shinar northward and built five cities, whereof Calah is said to have been "a great city." Did Asshur also build cities without a preëxisting population? But perhaps the purport of the text signifies that these cities had been built *at the date of the account.* Now, as the account ends with Peleg, it is presumable that the lifetime of Peleg marks the date of the account. But Peleg was the great-great-grandson of Shem; and in another, undoubtedly later, account (chapter xi) we have data which enable us to ascertain that Peleg was born 101 years after the

*Huxley, *Critiques and Addresses*, pp. 156, 172.

Flood, and died 239 years after the Flood. If, therefore, the ethnological table given in tenth chapter of Genesis was compiled by Peleg, or in the lifetime of Peleg, the utmost allowance of time is 239 years for the development of the populations of the nine cities "built" by Nimrod and Asshur. To me it seems more probable that Prenoachites were found in existence, and that the grandson and the great-grandson of Noah organized them under settled governments.

Still further, the *antediluvian* Jabal, son of Lamech and fifth in descent from Cain, "was the father of such as dwell in tents and [of such as have] cattle."* "Such as *dwell*" is a phrase which leads us to inquire, To what time does the present tense of the phrase refer? There must have been people dwelling in tents and having cattle *at the time of the composition of this history.* Such as "dwell" in tents and [have] cattle is a phrase implying that the descendants of Jabal were living in the time of Moses—if we admit that Moses was the author of the account—or in some post-diluvian age, if the account has a post-diluvian origin. This would mean, then, that the posterity of Cain were not destroyed by the Deluge; and hence that the Deluge was not "universal." The same line of reasoning applies to Jubal, "the father of all such as handle the harp and organ." It equally applies to Tubal Cain, "an instructor of every artificer in brass and iron." The descendants of these gifted patriarchs seem to have been in existence after the Flood. It is not admissible, then, on biblical grounds, to assume that Noah was the progenitor of all existing peoples.

This conclusion seems the more probable in view of the non-biblical evidence of a population in Noah's

*Gen. iv, 20.

time, which had survived the Flood. This evidence I will next examine

We find traces of an antediluvian, Tatar or Turanian population throughout Asia. It is not long since historians and ethnologists first noted the monumental and linguistic evidences of an older Hamitic stratum underlying the recognized Semitic civilizations of Babylonia and Assyria, and even of Canaan and Phœnicia. Now they inform us that unmistakable traces remain of a wide-spread Turanian stratum of people, still older than the first Hamitic settlements. Prichard says: "The Allophyllian nations appear to have been spread, in the earliest times, through all the most remote regions of the old continent — to the northward, eastward and westward of the Indo-European tribes, whom they seem everywhere to have preceded; so that they appear, in comparison with these Indo-European colonies, in the light of aboriginal or native inhabitants, vanquished, and often banished into remote and inaccessible tracts by more powerful invading tribes."* Canon George Rawlinson declares that everywhere Tatar tribes had preceded the spreading Noachidæ; and he holds that the primitive language of all Asia was Turanian or Tatar. "A Turanian language," he says, "extended from the Caucasus to the Indian Ocean, and from the shores of the Mediterranean to the mouths of the Ganges. We might, perhaps, largely extend these limits, and say that the whole eastern hemisphere was originally occupied by a race or races whose various dialects possessed the characteristics of the linguistic type in question" [Turanian].† Again, he says: "The Aramæans, Susianians or Elymæans, the early Babylonians, the

* Prichard, *Natural History of Man*, 4th ed., Vol. I, p. 183.

† Rawlinson, *Herodotus*, Vol. I, p. 525.

inhabitants of the south coast of Arabia, the original people of the Great Iranic Plateau, and of the Kurdish mountains, and the primitive populations of India, can be shown, it is said, to have possessed dialects of this character; while probability is strongly in favor of the same general occupation of the whole region by persons speaking the same type of language." Rawlinson, it is true, does not distinguish, in all cases, between indications of a Hamitic, and indications of a Turanian population, as we now distinguish them. He regards the Turanian as the original Noachite tongue, and seems to hold that proper Hamitic and Semitic dialects came into existence by improvement and absorption of the Turanian. In his "Table of Races,"* indeed, he makes the "Hamitic or Cushite" and the "Scythic or Tâtar," families of the "Turanian" race. But this affiliation of the Scyths is not admitted by ethnologists; nor do philologists permit us to confound Hamitic and Tatar languages. It is true that the Accadian, or primitive Hamite language of Assyria — called Turanian by Oppert — resembles the Finnish in the loose attachment of suffixes for numeral and pro-

* Rawlinson, *Herodotus*, Vol. I, p. 531. He seems drawn into this arrangement by a preconceived belief that the Turanians must be accommodated among the Noachites. Why the three primary families descended from Noah should be set down as "Indo-European," "Semitic" and "Turanian," instead of Indo-European, Semitic and Hamitic, I am unable to understand, though I perceive at once how such an arrangement accommodates traditional opinions. In regard to the Scythians, it ought to be said that the author, in his third volume, in an essay "On the Ethnography of the European Scyths," concludes that "the Scythians were not Mongolians, but members of the Indo-Germanic race. Language, as Mr. Grote correctly observes, is the only sure test; and language pronounces unmistakably in favor of the Indo-European, and against the Mongol theory." (*Herodotus*, Vol. III, p. 167.) Compare the fifth chapter of the present work.

nominal purposes. Nevertheless, the verb "forms its definitions chiefly by prefixes, and is thus completely alien to the style of the North Asiatic [Turanian] languages."* The attempt to merge together primitive Turanian and Hamitic dialects in the interests of a theory of a universal Flood is less sagacious than the recognition of a Turanian element as a fact in the primitive history of man. That the Turanian dialect was the language of Noah, and that the Hamitic was the same under the influence of culture and civilization, may be correct in a developmental sense; but in view of the common conception of linguistic distinctions it is a pure assumption, equaled only by the assumption that the Aryan languages grew up in a similar way. The Turanian was a distinct language, spoken by a distinct race; and the trilingual inscriptions of oriental monarchs include the Turanian, for the purpose of notifying Turanian neighbors, and probably a considerable Turanian constituency, of the exploits of victorious potentates.

A prehamitic population is recognized by Mr. C. L. Brace,† an author of acumen and erudition, who after stating that we recognize, in primitive times, four families of languages, the Turanian, the Semitic, the Aryan and the Hamitic, says: "The most ancient of these great families is the Turanian. . . . The Turanians were probably the first who figured in the ante-historical period. Their emigrations began *long before* the wanderings of the Aryans and Semites, who, wherever they went, always discovered a previous population, apparently Turanian in origin, which they either expelled or subdued." The first or "Medean" dynasty (so called), in the annals of

* J. Oppert, *Journal Asiatique*, Paris, 1837.

† Brace, *Races of the Old World*, pp. 27, 29.

Babylonia, is regarded by Mr. Brace as a Turanian empire. "Its Turanian character is derived from the inscriptions, which are in Turanian grammar, though with Hamitic vocabulary, indicating a great mixture with Hamitic population." * Simultaneously the Chinese empire rose into existence.

François Lenormant, an eminent original authority, affirms the existence of a pronounced Turanian element in the earliest populations and languages of the Mesopotamian regions. "To the earliest date that the monuments carry us back, we can distinguish, in this very mixed population of Babylonia and Chaldæa, two principal elements, two great nations, the Shumir and the Accad, who lived to the north and to the south of the country." The Shumir were Turanian, and had their capital at Sumere. The Accad were Cushite, and had their capital southward from the others, at Accad. The Sumerites spoke a dialect of the Uralo-Finnish family. Lenormant continues: "The Turanians were one of the first races to spread out into the world, *before the time* of the great Semitic and Arian migrations; and they covered a great extent of territory, *both in Asia and Europe.* They then occupied all that district between the Tigris and the Indus, afterward conquered by the Iranians; and they also held the greater part of India [referring to the Dravidians]. When the Semites on the one hand, and the Arians on the other, had finished their migrations and were finally established, there always remained between them a separating belt of Turanian people, penetrating, like a wedge, as far as the Persian Gulf, and occupying the mountains between Persia and the Tigro-Euphrates basin." Media was populated partly by a Turanian race, which also

* Compare Rawlinson, *Ancient Monarchies*, I, p. 69.

formed "a notable portion of the population of Susiana. . . . The primitive center whence all the Turanian people had spread into the world was toward the east of Lake Aral. There, from very remote antiquity, they had possessed a peculiar civilization, characterized by gross Sabeism. . . . This strange and incomplete civilization exercised *over a great part of Asia an absolute preponderance*, lasting, according to the historian Justin, 1500 years. All the Turanians of Asia carried this civilization with them into the countries they colonized." The language of the Median Turanians, according to Westergaard, was decidedly Turkish in its affinities; the Chaldæan Turanian was Ural-Finnish; the Susianian was a connecting link between the latter and the Dravidian. "The Turanians brought to Babylon and Assyria that singular system of writing called cuneiform." The nature of the symbols employed in this writing "apparently points, as the place where that writing was invented, to *a region very different from Chaldæa*, a more northern region, whose fauna and flora were markedly different, where, for example, neither the lion nor any other large feline carnivora, were known, and where there were no palm-trees." *

One can hardly understand how Lenormant, after enunciating such conclusions, can avoid the ulterior conclusion, that the Turanians were prenoachites. He traces them, however, to Magog of the Japhetic family, — leaving, nevertheless, the Chinese to stand as descendants of non-noachite antediluvians, and thus disrupting a race which, at least in Asia, is one, physically and linguistically, to satisfy the demands of a theory of diluvial universality, which, in spite of this expedient, he sets aside at last. Now, when we admit, for

* F. Lenormant, *Ancient History of the East*, Am. ed., I, pp. 341–347.

once, the prenoachite origin of all Mongoloids, a most sensible relief is felt. It is no longer necessary to confound Turanians and Gomerians; it is no longer necessary to resist the evidence of the Japhetic descent of the Scythians, a branch of the Gomerians, or suppose that a Japhetic twig, in being *named* Turanian, becomes the comprehensive type of both Semitic and Hamitic peoples — Japhetic, Turanian, Hamitic and Semitic, all at once! It is no longer necessary to assume that the descendants of Gomer spread themselves all over Asia and Europe, while the Hamites and Semites, and the other Japhetites, were holding back, to give this particular tribe of Japhet time to preëmpt the world, and become more populous than all the other sixty or more Genesiacal sons and grandsons of Noah.* It is no longer necessary to sunder into two widely separated stocks the Mongoloid nations of Asia, whom all ethnologists have found united, and whose profound affinity is disclosed by all linguistic researches. It is no longer necessary to confound with Turanians and Japhetites, and finally Hamites and Semites, the Dravidians, whom ethnology, following linguistics, has so decisively separated. All the facts disclosed by Assyro-Babylonian and Persepolitan researches are much more readily coördinated with the theory of prenoachites, and even of preadamites, than with the old and distorted, and unbiblical, theory of the descent of all the

* It is the opinion of some that the name Scythian, a strictly Japhetic word, was extended from the Japhetic Scythians to similar nomadic Turanian hordes in Asia. This idea receives a quasi-recognition by Lenormant in his second volume (pp. 126–130). This is not unlikely; but what, in this case, becomes of the theory that these very Asiatic Turanians are to be accounted for by ascribing them to a Gomerian ancestry? If they are Gomerians they are not Turanians; if they are Turanians, they are *not* Gomerians — and then, what are they, in the Noachic ethnography?

races from Noah. I confidently leave the presumption with the reader. The argument becomes still stronger when we learn that even the Asiatic Mongoloids — Turanians and Chinese alike — were not a primordial population.

The Chinese, Mongoloids as they are, have succeeded to a primitive population considerably inferior to them in racial characteristics, as they manifestly were in civilization. The relics of the aboriginal population still lead a half savage life in some of the mountainous districts of China.

The Aïnos, now confined chiefly to the island of Yeso, are regarded as the remnants of a primitive people to whom the Coreans and Japanese have succeeded.* Related to them, however, are the inhabitants of southern Saghalien, and the Kurile islands, and the Giliaks on the lower Amoor. The Aïnos, while in many respects resembling the Japanese, are distinguished by a luxuriant beard, bushy and curly hair of the head, and a general hirsuteness of the body.† (See fig. 7.) Throughout the region of the northern Asiatics we find similar remnants of primeval populations possessing distinct features and dialects,

* Prof. E. S. Morse thinks he finds in some shell-heaps near Tokio (in Omori), Japan, pottery which was not made by Aïnos; and he regards it as evidence of a race even older than the Aïnos. (Morse, "Traces of Early Men in Japan," *Popular Science Monthly*, January, 1879, p. 257.)

† Blakiston, "Journey in Yezo," in *Journal of the Royal Geographical Society*, Vol. XLII, p. 80; A. S. Bickmore, in *Proceedings Boston Society of Natural History*, December 4, 1867, March 4, 1868; *American Journal of Science and Arts*, II, Vol. XLV, p. 353–77, and authorities there cited; Brace, *Races of the Old World*, p. 160. The existence of a general hairiness of the entire body has been disputed. See Lieut. Habersham's account, in Nott and Gliddon's *Indigenous Races of the Earth*, pp. xii, 620, 621. Bickmore insists that the Aïnos are clearly Aryan, and this is the view of Dr. Pickering.

though in both giving evidence of their substantial identity with the Mongoloid or Turanian race. Of this class of residual populations I believe all those whose languages stand apart from other prevailing Mongoloid types may be regarded as examples. They are mere outliers of an ancient population, which, like the islets that mark the place of a wasted continent, remain as outstanding testimonies of its former existence. Such detached tribes are the Ostiaks of the Yenesei (not of the Obi), who, though speaking six peculiar dialects, are reduced to one thousand individuals; and the Yukagiri, who have so recently become extinct from certain islands of New Siberia that vestiges of them still remain.

From many and various indications, therefore, it appears that the greater part of the continent of Asia has been overspread by a primitive Mongolian race, of which all the historical, and now dominant, races — not less the Chinese and Japanese than the Noachites — are the successors. In the peninsula of India, however, the indigenous race was not Mongoloid. I have recalled the facts,* now notorious, establishing the presence of an indigenous non-mongoloid people in Hindustan, whom the encroaching Noachites of the Aryan family gradually displaced or absorbed. Though this race, physically, has almost disappeared, except so far as it forms a visible constituent in the modern Hindu race, the imperishable fragments of its language have survived in great abundance. The Dravida were a brown race, like the Mongoloids, and it is a fact of profound interest that their language also presented such Turanian resemblance that some philologists have been disposed to regard it a sister of the primitive

* In chapter vi.

Mongoloid.* These facts carry our thoughts back to a time when the primitive Mongoloids and primitive Dravida were co-possessors of the Asiatic continent, speaking cognate dialects of a parent tongue, which had been dually transformed, with the disappearance of the premongoloid type of humanity which was superseded by the brown races of ancient and modern times.

Evidences exist of a prehamitic population in the valley of the Nile. The Egyptian language is neither properly Hamitic nor Semitic. It is regarded by some philologists as representing the transition from Turanian to Semitic.

Turning our attention to the European continent, we discover that every Asiatic immigration of which we possess any knowledge encountered populations already in possession of the soil.

The ancient poets and historians have left us numerous accounts of a barbarous people who inhabited Europe before the advent of representatives of Noachites, or the Mediterranean race. They were described as dwelling in caverns, and having no knowledge of the metals, nor of the arts of weaving, plowing and navigation. They were unacquainted with domestic animals, save the sheep and the goat. They belonged to an unfamiliar race, and had no knowledge of the gods or the religion of their Asiatic invaders. Æschylus, in the "Prometheus Bound,"† describes Prometheus as first introducing the plow and beasts of burden. Prometheus was represented as the ancestor of the Greeks. Æschylus wrote 470 B.C. Homer,‡ who

* Whitney, *Language and the Study of Language*, p. 327, where, however, this approximation is condemned.

† Æschylus, *Prometheus Bound*, vers. 462–464.

‡ Homer, *Odyssey*, ix, vers. 113–14.

wrote at an earlier date, tells us that in the time of Ulysses (1250 B.C.), men were still in possession of some parts of Europe who lived in caverns among the mountains. They did not labor; they did not even cultivate the soil.* They possessed goats and herds, but no horses.† They were ignorant of navigation.‡ They were known as Cyclopes — the children of Heaven and Earth, says Hesiod,§ while the Greeks were descended from Prometheus, the son of Japetus (Japheth), who was also the offspring of Heaven and Earth. Thus the Greeks and Cyclopes had no human ancestor in common. Their divergence is further shown by the ignorance which Polyphemus avows of the Greek Zeus and the other all-powerful gods.‖ They were ignorant even of the name of Zeus, though among the ancestors of the Greeks that name was honored from the Ganges to the Euxine. The Cyclopes or cave-dwellers, therefore, were not Greeks nor Indo-Europeans. That they were neither Semites nor Hamites is justly inferred from the fact that the migration-courses of these families, according to all admissions, did not carry them, in primitive times, across the European boundary.**

According to Thucydides, the Cyclopes preceded the Sicanes in Sicily. The Sicanes were of the Iberian stock, and are believed to have arrived in Sicily about 2000 B.C. Who the Iberians were is still a matter of some doubt. They did not belong, apparently, to the Mediterranean race; but this is a subject which I shall consider hereafter (chapter xxiii). Aristotle also speaks of the Cyclopes, and, citing from Homer, tells

* *Ib.*, 108, 122. † *Ib.*, 124, 160, 167. ‡ *Ib.*, 125–128.
§ Hesiod, *Theogony*, vers. 133, 139. That is, "Sons of God."
‖ *Odyssey*, ix, 271–275. ** See chapters iii and iv.

us that each father of a family ruled over the women and children of his household.* The same ideas are set forth more at length by Plato.† Pausanias, who wrote in the first half of the second century after Christ, says that Pelasgos — a personification of Pelasgians (as Hellen, of the Hellenes) — found the Cyclopes in the Peloponnesus; that they neither built houses nor wore clothing; that they subsisted on leaves and herbs and roots; and that Pelasgos taught them to construct cabins, and to clothe themselves with the skins of the wild boar.‡ Diodorus Siculus, who wrote in the first century before our era, tells us that the most ancient inhabitants of Crete, also, were dwellers in caverns, and destitute of all the arts, until the Pelasgic Curetes taught them the first elements of civilization.§ According to Virgil, the population of cave-dwellers also spread over Italy** — autochthonous fauns and nymphs — a race of men born from the hard trunks of the oak, living without laws or civilization. Pausanias†† informs us that a similar people inhabited Sardinia. Diodorus Siculus‡‡ states that the inhabitants of the Balearic Islands still dwelt in caverns in the first century before our era, and wore no clothing during the summer. Strabo, a little later, names four Sardinian tribes who had not yet learned to build cabins.

As to the ethnic affinities of these prenoachite populations of Europe, I think there are good reasons for

* Aristotle, *Politica*, lib. i, ch. 1, ed. Didot, t. I, p. 483.

† Plato, *Leges*, ed. Didot-Schneider, t. II, p. 298–301.

‡ Pausanias, *Description of Greece*, lib. viii, ch. 1, §§ 2, 5, 6, ed. Didot-Dindorf, p. 364–5.

§ Diod. Sic., lib. v, ch. lxv, ed. Didot-Müller, t. I, p. 294–5.

** Virgil, *Æneid*, viii, 314–318.

†† Pausanias, lib. x, ch. xvii, § 2, ed. Didot-Dindorf, t. I, p. 512.

‡‡ Diod. Sic., lib. v, ch. xvii, §§ 1, 3, ed. Didot-Müller, t. I, pp. 263–4.

regarding them as near relatives of the Asiatic Mongoloids. Several historical allusions seem to sustain the opinion that they belonged to the Finnish family. In the time of Tacitus,—about A.D. 100,—the Finns of Scandinavia and the north of modern Russia still supported themselves by the chase, and were ignorant of the use of metals, and pointed their arrows with bone.

They had no horses; they built no houses; they wove no cloth. They did not, indeed, dwell in caverns, but erected a sort of hurdles or rude shelters for protection against rain and snow.* In our own times, the Finns are driven into still narrower limits by the continued encroachments of the Indo-Europeans; but according to Grimm,† linguistic affinities justify us in regarding the Finns as the modern remnants of the Cyclopean population which spread over Europe before the advent of the Pelasgians and Iberians, in the southeast and southwest of the continent, about 2000 years before the Christian era.

Rawlinson says the Kelts "found the central and western countries of Europe either without inhabitants, or else very thinly peopled by a Tatar race.‡ This race, where it existed, everywhere yielded to them, and was gradually absorbed, or else driven toward the north, where it is found, at the present day, in the persons of the Finns, Esths and Lapps."§ He adds: "It is now generally believed that there is a large Tatar admixture in most Keltic races, in consequence

* Tacitus, *Germania*, ch. xlvi.

† Grimm, *Geschichte der Deutschen Sprache*, 3d ed., p. 121. Also, *Kleinere Schriften*, t. II, p. 80.

‡ While the Kelts in central and northern Gaul were confronted by an indigenous Tatar population, they were opposed in the south by the Pelasgic Illyrians. See chapter v.

§ Rawlinson, *Herodotus*, Vol. III, p. 155.

of this absorption." The Tatar indigenes, he says, may also have been, in part, driven westward. "The mysterious Cynetians* who dwelt west of the Kelts, may have been a remnant of the primitive Tatar occupants. So, too, may have been the Iberians of the Spanish peninsula."

"In the Spanish peninsula," says Niebuhr, "it is not quite certain whether, on their arrival, they [the Kelts] found Iberians or not; but if not, these latter must have shortly crossed over from the African main; and it was in consequence of the gradual pressure exerted by this people upon the Kelts in Spain, that the further migrations of the Keltic tribes took place." †

Now, it is generally held that the Basques are a remnant of the ancient Iberes. They number about half a million. They speak a language known as Euscara, and dwell in the northeast provinces of Spain, and a small district in the southwest of France. "The old geographers," says Peschel, "called them Iberians; they then peopled the whole of Spain and the southwest of France, but were early driven toward the west and south by the Kelts, and intermixing with them, in the district of the present Catalonian dialect, constituted the Keltiberians. . . . According to Paul Broca, their language stands quite alone, or has mere analogies with the American type. . . . Of all Europeans, we must provisionally hold the Basques to be *the oldest inhabitants of our quarter of the world.*" ‡

The Euscara "has some common traits with the Magyar, Osmanli and other dialects of the Altai family; as, for instance, with the Finnic on the old con-

* *Herodotus*, Bk. II, ch. xxxiii, and IV, xlix.

† Niebuhr, *Roman History*, Vol. II, p. 520.

‡ Peschel, *Races of Men*, p. 501.

tinent, as well as the Algonkin Lenape language and some others in America. . . . For this reason the Bascongadas [Basques] are classed by some with the remains of the Finnish stem of Europe, in the Ubic family of nations; by others, in that of the Allophyle* race. . . . The settlements of Phœnicians, Greeks and Carthaginians [Noachites] on the coasts of the Mediterranean sea are of much later date" than the conflict of the Kelts and Iberians.†

"Before this epoch" [1400 B.C.], says Le Hon, "history establishes the existence on the soil of Spain of the great nation of Iberians, which is affiliated in no respect with the Indo-European race, neither by its physical type nor by its language."‡ As Hamites and Semites never invaded western Europe, in these early times, the Iberians, according to Le Hon, were not Noachites. Similarly, M. Maspero advances the opinion that the Basques, the descendants of the Iberians, are Turanians, of the same race as the Finns.§

It appears, therefore, to be generally agreed that the Basques are a remnant of the ancient Iberians, and that they possess no ethnic affinities with the Noachites traced from their Asiatic center; but do indicate physical and linguistic relations with the type of Mongoloids. History, tradition, linguistics and ethnology conspire to fortify the conclusion that in prehistoric times all Europe was overspread by the Mongoloid race, of which remnants have survived to our times, in the persons of the Basques, Finns, Esths, Lapps, and some smaller tribes.

*The Allophyle type of Quatrefages embraces the Esthonians, the Caucasians (in the restricted sense) and the Aïnos. The term was introduced by Prichard.

† *New American Cyclopœdia*, art. "Basques," p. 708.

‡ Le Hon, *L'Homme Fossile en Europe*, p. 259. See also p. 153.

§ Maspero, *Histoire ancienne des peuples de l'Orient*, p. 135.

Some confirmation of this conclusion comes from the study of human skulls of the prehistoric period. The skulls from the cavern of Frontal, in Belgium, are markedly brachycephalic,* and by the flattening of the occiput remind one vividly of the Mongoloid skulls from American "mounds." "It is impossible to confound them," says Pruner Bey, "with the skulls of the Aryan race, where the contours are all oval. The angular contours of the crania found at Furfooz (Frontal), and the lozenge-shaped figure of the face, *class them clearly among the Turanian or Mongol races*,—a conclusion confirmed by the learned curator of the Anthropological Society [of London], Mr. Carter Blake. The eminent president of the Anthropological Society of France, seeking to ascertain to what branch of the great Turanian race the ancient people of Furfooz might be referred, assigns them to the Ligurian† or Iberian type, which still exists in the north of Italy and in the Pyrenees, and which history seems to indicate as the most ancient inhabitants of the countries of which it has preserved the memory. The analogy between the crania of Furfooz and those of this people is such that it seems impossible to contest the conclusion which M. Pruner Bey has so brilliantly established."‡ The skulls found at Solutré have also been studied by Pruner Bey, and decided to belong to a race which he designates a "primitive mongoloid race," which is still represented by the Iberians, or so-called Ligurians, of the Gulf of Genoa, in the Pyrenees, and in arctic America.

*These terms will be found explained in the next chapter, where more precise data will also be given.

†The Ligurians are not generally regarded as co-racial with Iberians. They were probably Aryans. See chapter iii.

‡Le Hon, *L'Homme Fossile*, pp, 83, 84

Many similar opinions might be cited tending to establish the conclusion, on palæontological grounds, that a brachycephalic and Mongoloid race was generally distributed throughout western Europe before the advent of Hamitic or Aryan immigrants.

Mingled with these, however, were people possessing dolichocephalic skulls. The Cro-Magnon skulls are thus characterized by Pruner Bey: "Mongoloid, dolichocephal, and having a large brain." Similar is the skull of the Mentone skeleton. The crania of Engis, Engisheim, Neanderthal and Olmo are of the same type. The idea has been advanced that "*anteriorly* to the brachycephalic Mongoloid race there must have existed in Europe a singular race possessing a dolichocephalic cranium."* This peculiar race may explain the occurrence of dolichocephalism among the ruling brachycephals of the age of Polished Stone. Dolichocephalism, as a character of inferior races, is a fact quite in accordance with the theory of progressive improvement. It should be mentioned, too, that modern Mongoloids, in their different families, present all degrees of dolichocephalism and brachycephalism; so that the commingling of both types, in remote prehistoric times, is quite compatible with the assumption that one Mongoloid race spread over all Europe. The point, however, which I desire here to establish is the prevalence of a non-Aryan and non-Hamitic type throughout Europe in the period preceding the accession of the Noachite tribes of Asia.

*Le Hon, *L'Homme Fossile*, p. 57. See also Lenormant, *Les Premières Civilisations*, Vol. I, p. 36. See the subject splendidly illustrated by A. de Quatrefages and Ernest Hamy, in *Crania Ethnica*, 4to, Paris, 1873. These authors claim to have shown the existence of *three* different races in the human fauna of the Quaternary Period.

I think it appears from the foregoing citations that the general opinion among ethnologists sustains the doctrine of a wide-spread Mongoloid population over the continents of Asia and Europe, save where the Dravidians held possession of the peninsula of Hindustan and neighboring regions. It appears that this race has been recognized in the prehistoric people of Europe, in the ancient Iberians, and in the modern Basques, Finns, Lapps and Esths, as well as in sundry remnants of primitive peoples of the Asiatic countries still held by Mongoloids. It appears that this population was spread over the two continents at a date much earlier than that commonly assigned to the Deluge, and that the posterity of Noah, in their dispersion over Europe and Asia, were everywhere confronted by races of men already in possession of the earth.

What is the meaning of these facts? It is impossible to harmonize them with the theory that all mankind are descended from Noah. The descendants of Noah found them in every new country, and could give no account of their origin. They were in existence at an epoch too remote to allow the suggestion of a post-diluvian origin. They belonged to a different race from the posterity of Noah.

We are confirmed by the import of the facts of contemporaneous history. They force upon us the inference of different epochs for the Mongoloid and the Mediterranean races. They are two distinct types of mankind. They are as distinct physically and psychically as they are linguistically. They manifest socially a total repugnance to each other. We do not discover the least tendency to coalesce. Their racial distinctness has been equally great from the remotest historical times; and it is impossible to affirm from observation that the two races are even in progress of divergence.

Under these circumstances, it is incredible that their divergence commenced but four thousand years ago. Again, the very populousness of the Mongoloids argues the high antiquity of their race. They number forty-four per cent. of the whole population of the world. Four hundred years ago they were probably twice as numerous as all the Hamites, Semites and Aryans then in existence. They have spread over vastly more territory than the Mediterranean race, and have encountered the vicissitudes of even a greater range of climates, — a contrast all the more apparent if we extend the comparison back a few centuries. In the Old World they brave the rigors of the shores of the Arctic Sea, quite secure from the encroachments of the White race. They luxuriate over tropical peninsulas and the islands of the Pacific. In America they begin upon the desolate coasts of the Frozen Ocean, and stretch through every degree of latitude, across the equator, and onward to the sleety and rock-bound retreat of Terra del Fuego. They hold undisputed possession of Greenland. They have infused their blood into a third of the populations of Europe. Now, I hold that these facts of daily observation strongly remind us of the comparatively high antiquity of this race. In my own mind, the only question remaining is, whether they are not descendants of preadamites as well as of prenoachites. But this question I do not hasten to press. I am satisfied to point out the prenoachian origin of the two brown races.

As a corollary of this conclusion, the deluge of Noah was not universal, and did not destroy all human beings, but only all the people which fell within the the purview of Semitic history and tradition, — perhaps the history and tradition of the White race. No anxiety should be occasioned, therefore, if the history of the

Brown races,—that of the Chinese, for example,—is found to run back over a period more remote than the accepted epoch of the Deluge. Finally, it may be added, the local nature of the Deluge is proved not only by the existence of prenoachite races, but by a number of other considerations, which have of themselves determined the belief of most persons who feel free to cut loose from traditional opinions.

It seems almost superfluous to note that geology supplies no evidence of the universality of the deluge of Noah. Neither the fossiliferous strata, inclosing relics of the sea in the highest hills,—the proof to Scilla, Woodward and Burnet of the "universal deluge,"—nor even the bones of man discovered in the caverns of Europe—to Buckland, the "Reliquiæ Diluvianæ,"—are now imagined by science to have any connection with the deluge recorded in Genesis. That local deluges have occurred, of such magnitude as to serve as a basis for such primitive accounts as we find in the annals of the Babylonians, Hebrews and Greeks, geology renders eminently probable; and thus confirms, substantially, one of the most extraordinary narratives of the Bible.

CHAPTER XI.

RACE DISTINCTIONS.

THAT the Brown races constituted wide-spread populations in Asia and Europe at the time of the dispersion of the posterity of Noah, seems to be a conclusion established beyond reasonable cavil. I anticipate that the judgment of anthropologists will yet pronounce them preadamites. The four Black races must be regarded as prenoachites, on the strength of all the evidence which concerns the epoch of the Brown races, together with the added evidence which I shall offer that they are even descended from preadamites.

When we contemplate the Black races in their general expression, they appear to be strongly isolated from the rest of mankind. In their anatomical, physiological and psychic characteristics, we can barely say that a deep-laid basis of human sympathy and likeness exists between them and us; but this is so covered up by the more obtrusive details of their being and life, that the first impression remains ineradicable, that these are creatures which are practically strange to our tastes, our modes of thought and our very natures. I shall claim for these races all the characteristics, rights and responsibilities which pertain to humanity; but I will not affect to ignore the ethnic chasm which splits them from the mass of Noachite humanity. Withdrawn in their color, features and relative intelligence, they are similarly withdrawn in their geographical positions. Shut up for countless ages within the

bosoms of vast and impenetrable continents, it seems as if Nature, conscious of their irremediable estrangement, had contented herself to herd them in regions where they would never mingle in the stir and strife of social and national struggles. When we consider what mankind has achieved, these humble races never enter our thoughts. They have written no history; they have achieved no results for history to record. Their thousands of years outlived are silent, and dark and blank; not an echo of a former generation comes down to our apprehension. If we learn aught of their past, it is through the studies of the White race. If we unravel the mystery of their migrations, their affinities, or their origin, it is by studying their zoölogical characters and their fossil remains, as we investigate the natural history of the horse or the pig. For all which *they* have achieved, this planet would have remained in the wildness and ruggedness of Nature. All which they have accomplished would have left our continents in the condition in which they were the home of the *Brontotherium*, the *Sivatherium* or *Coryphodon* of middle and earlier Tertiary time. The breach which separates brutishness, indolence, inertia and stupidity from the indomitable energy, the flashing intellect, and the heaven-reaching aspirations which have made our planet the abode of civilization, art and science, is a breach which reaches back more than a few centuries, more than a few generations, and must find its origin deep in the ages, and in the early divarication of courses of events which have emerged in our own times. In short, these races were preadamic.*

* The following is Theodore Parker's estimate of the relative importance of the Caucasian race: "The Caucasian differs from all other races: he is humane, he is civilized, and progresses. He conquers with his head as well as with his hand. It is intellect, after all, that

I. ADAM A WHITE MAN.

I have assumed that the person who has been named Adam was a real representative of the White race. It is true that nearly every nation conceives of the *first* man as a representative of its own race. Reputable authorities have contended that Adam was *not* a white man. Eusebius de Salles represented him as *red*; Prichard believed him *black*. There is, indeed, a legend in existence, which has obtained wide-spread currency, according to which the first man was of dark or black complexion. If, as I am about to argue, some Black race first represented humanity upon the earth, there is reason for saying the first man was black. Adam, then, in the sense of "the first man," was a black Adam. There is even said to be a tablet in the British Museum, brought by the late George Smith, on which is an inscription which lends strange countenance to the legend of the black Adam. It is the inscription, marked "K 3364," containing an account of the creation of man by the god Mir-Ku (noble crown). "To fear them [the gods] he made man; the breath of life was in him. May he [the god Mir-Ku] be established, and may his will not fail in the mouth

conquers, not the strength of a man's arm. The Caucasian has been often master of the other races — never their slave. He has carried his religion to other races, but never taken theirs. In history, all religions are of Caucasian origin. All the great limited forms of monarchies are Caucasian. Republics are Caucasian. All the great sciences are of Caucasian origin; all inventions are Caucasian; literature and romance come from the same stock; all the great poets are of Caucasian origin,— Moses, Luther, Jesus Christ, Zoroaster, Buddha, Pythagoras were Caucasian. No other race can bring up to memory such celebrated names as the Caucasian race. The Chinese philosopher Confucius is an exception to the rule. To the Caucasian belong the Arabian, Persian, Hebrew, Egyptian; and all the European nations are descendants of the Caucasian race."

of the dark races which his hand has made." When this dark man had sinned, the god Hea's liver was angry, and the father Elu pronounced man's curse: "Wisdom and knowledge hostilely may they injure him . . . may he be conquered . . . his land, may it bring forth and he not touch it . . . his desire shall be cut off, and his will answered . . . the opening of his mouth no god shall take notice of . . . his back shall be broken and not healed . . . at his urgent trouble no god shall receive him." *

I shall not offer conjectures as to the meaning of this. It seems to imply that the first race was "dark"; but this could easily be without *Negro* blood. And if the allusion is to the Negro race, the curse may easily have been written after that race developed its sad aptitude for slavery. Very probably, however, the allusion is to the first man of the Babylonian race. The writer, cognizant of the affinity between Babylonians and Hebrews, may refer to the same personage as the author of Genesis in speaking of the "first man." The Babylonian curse, indeed, seems little more than the echo of that pronounced against the Hebrew Adam. (See note, page 475.)

The Adam with whom we are concerned is the *biblical* Adam. What was his ethnic status? Let us first see what an examination of the text may reveal.

Genesis I, 26: "And Elohim said, let us make ÂDâM in our image."

Verse 27: "So Elohim created the ÂDâM."

Genesis II, 5: "And [there was] not ÂDâM to till the ADâMâH."

Verse 7: "And Jehovah Elohim formed the ÂDâM of the dust of the ADâMâH . . ."

* This information is from a letter of Moncure D. Conway, to the *Cincinnati Commercial*, Oct. 1878.

Verse 8: "And there [in Eden] he put the ÂDâM whom he had formed."

Verse 9: "And out of the ADâMâH made Jehovah Elohim to grow every tree . . ."

Verse 19: "And out of the ADâMâH Jehovah Elohim formed every beast of the field, and every fowl of the air, and brought them to the ÂDâM to see what he would call them; and whatever the ÂDâM called every living creature, that was the name thereof."

Verse 20: "And the ÂDâM gave names to all cattle. . . . But for ÂDâM there was not found a help-meet for him."

Verse 21: "And Jehovah Elohim caused a deep sleep to fall upon the ÂDâM . . ."

Verse 22: "And the rib, which Jehovah Elohim had taken from the ÂDâM, made he ISHâH and brought her to the ÂDâM."

Verse 23: "And the ÂDâM said, This is now bone of my bones, and flesh of my flesh; she shall be called ISHâH, because she was taken out of ISh."

Verse 24: "Therefore shall ISh leave his father and mother, and shall cleave unto his ISHâH (ISHTO)."

From these passages, among others, we understand that "man" in general, or a "male" being, is expressed by ISh; and a "woman" in general, or a "female" being, by ISHâH. The word ÂDâM, therefore, signifies, in this connection, some particular man; and though used as a common substantive, with article prefixed, it has the force of a proper name. As such our version renders it for the first time in Genesis ii, 19.

In the next place, the radical letters of ÂDâM are found in ADâMâH, *something out of which vegetation was made to germinate*,—rendered "ground" in our version. There is some common conception, therefore, in ÂDâM and ADâMâH; what is it? Turning to

Gesenius we find the following: "ÂDôM and ÂDOM, *red*, *ruddy*, e.g., of a garment sprinkled with blood, Isaiah lxiii, 2; of ruddy cheeks, Canticles v, 10; of a chestnut or bay-colored horse, Zechariah i, 8, vi, 2; of a red heifer, Numbers xix, 2; of the reddish color of lentils, Genesis xxv, 20." Next, we have "ADâMâH, *earth*; so called from its reddish color." Finally, "ÂDâM, *a man*, a human being, male or female, pp. *red*, *ruddy*, as it would seem. The Arabs distinguish two races of men: one *red*, *ruddy*, which we call *white*; the other black."

Now, it appears that the common conception in ÂDâM and ADâMâH is *redness* or *ruddiness* of color. I think we may fairly presume, on biblical as well as anthropological grounds, that Adam was strongly colored, but not black. We have shown already that his Hamite posterity was ruddy; here is the old record which also declares that Adam was ruddy. This tint is found only in the Mediterranean race. The unmixed black races do not possess *ruddy* complexions. The ruddiness of Adam was transmitted to "sunburnt" Kham, while others of his posterity had acquired a complexion characteristically *white*.

A further conception common to ÂDâM and ADâMâH is the essentially earthy constitution of the first man. He was formed "of the dust of the ADâMâH"; and, accordingly, after his transgression he was reminded of his origin: "Dust thou art, and unto dust shalt thou return."

II. RACIAL DISTINCTIONS.

The Adam with whom we have to deal was, therefore, the ruddy-complexioned progenitor of the race and nations whose history falls within the purview of the Bible. He was the progenitor of the Mediterranean race

in its *Blonde* and *Brunette* and *Sun-burnt* subdivisions, and of other peoples descended from Seth or Cain, or other sons, who may have constituted other races,—possibly (not probably) the *yellow* and *reddish* and *swarthy* tribes of the Mongoloids and Dravidians; or still other types of ruddy complexion, who have been displaced from existence before our times.

We must now consider *how divergent from this representative of the Mediterranean race are the men of those races which I have designated Black.* With the comparisons of the White and Black races I shall connect the Mongoloids, for the sake of throwing additional light on the comparisons, and because, in briefly characterizing the races (in chapter vi) I avoided all statistical details.

1. Anatomical Comparisons. These take the first rank in importance; and the head is the capital structure in affording significant and trustworthy results. Of all measurements of the head, the capacity of the cranium is shown by observation to be most intimately connected with racial character. In the following tables I have gathered together the results of a large number of measurements.

CRANIAL CAPACITIES.

I. NOACHITES.

	Men. Cubic Cent.	Women. Cubic Cent.	Average. Cubic Cent.	Authority
570 Europeans, mostly of S. W. Europe,	1,576	1,395	1,485	Broca.
38 Europeans,	-	-	1,534	Morton.
293 Britons, Anglo-Saxons, Swedes, Irish, Netherlanders,	-	-	1,482	Davis.
901 Noachites, mean capacity,			1,500 1,486 *	

II. MONGOLOIDS.

		Men. Cubic Cent.	Women. Cubic Cent.	Average Cubic Cent.	Authority.
22	Chinese,	1,518	1,383	1,450	Broca.
21	Chinese,			1,452	Davis.
18	Mongols,			1,421	Morton.
12	Eskimo,	1,539	1,428	1,488	Broca.
7	Asiatic Eskimo,			1,488	Dall, etc.
6	N. W. American Eskimo,			1,270	Dall.
101	Greenland Eskimo,			1,250	Bessels.
126	Eskimo, mean capacity,			1,372 1,286 *	
61	Chinese and Mongols, mean capacity,			1,441 1,442 *	
187	Mongoloids, mean capacity,			1,403 1,338 *	

III. NEGROES.

85	Negroes, W. Africa,	1,430	1,251	1,345	Broca.
79	Negroes of Africa,			1,364	Morton.
12	Dahoman Negroes,			1,452	Davis.
176	Negroes, mean capacity,			1,387 1,360 *	

IV. AUSTRALIANS.

18	Australians,	1,347	1,181	1,264	Broca.
15	Australians,			1,295	Davis.
33	Australians, mean capacity,			1,279 1,276 *	

We perceive from these tables that the cranial capacity of the Negroes exceeds that of the Australians 84 cubic centimeters, or 6.6 per cent. That of the

* These means are obtained by giving relative weight to the different *numbers* of crania of the different classes. The reader will at once understand that the mean capacity of 608 European skulls, of which 570 average 1,485, and 38 average 1,534, will not be half the sum of 1,485 and 1,534, since there were over 14 times as many measuring 1,485 as there were measuring 1,534.

Asiatic Mongoloids exceeds that of the Australians 166 cubic centimeters, or 12.9 per cent. That of the White race exceeds that of the Australians 210 cubic centimeters, or 16.5 per cent. The White race surpasses the Negro 126 cubic centimeters, or 9.3 per cent.

The following are some recent mean determinations of cranial capacity reported by Prof. W. H. Flower: *

Eskimo,	1,546 †	True Polynesians,	1,454
English, of low grade,	1,542	Negroes, various,	1,377
Guanches,	1,498	Kaffirs,	1,348
Japanese,	1,486	Hindoos,	1,306
Chinese,	1,424	Australians,	1,283
Italians,	1,475	Andamanese,	1,220
Ancient Egyptians,	1,464	Veddahs,	(not stated)

Flower's measurements may be grouped and averaged as follows:

Modern Noachites,	1,508	Negroes,	1,362
Ancient Hamitic Noachites,	1,481	Papuans,	1,337
Mongoloids,	1,455	Australians,	1,283

Here, it will be seen, the racial means are slightly higher without changing their relative positions.

Another cranial measurement in high esteem among anthropologists is the proportion between the length and breadth of the skull. The length is measured antero-posteriorly, and the breadth from side to side. The ratio of these two measurements is expressed in

* Flower, in *Nature*, 29th of August, 1878, p. 481,—a paper read before the British Association.

† This result presents a remarkable divergence from Bessels' determinations quoted above.

percentage of length; that is, the length of any skull being represented by 100, the "cephalic index" is the portion of this 100 covered by the breadth. Skulls which have a cephalic index between 74 and 78 are said to be *mesocephalic*, because this is about the average of mankind. If the index is above 78, they are said to be *brachycephalic*; if below 74, they are *dolichocephalic*. It will be noted that though brachycephalic and dolichocephalic signify "short-headed" and "long-headed," they refer only to the width in relation to the length. Hence a dolichocephalic cranium may be actually shorter than a brachycephalic cranium. A certain relative width of skull appears to be connected with energy, force and executive ability. It is needed to give effect to the other capabilities of the individual or the race.

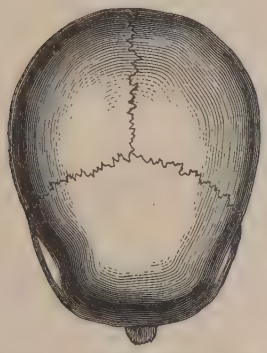


FIG. 16. Mesocephalic Cranium. (Mediterranean.)

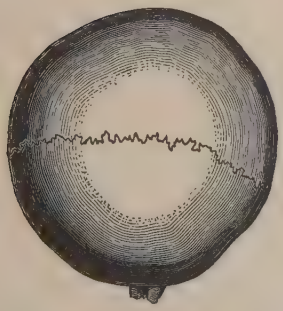


FIG. 17. Brachycephalic Cranium. (Mongol.)

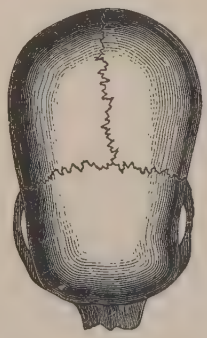


FIG. 18. Dolichocephalic Cranium. (Negro.)

CEPHALIC INDEX.

I. NOACHITES.

31	Irish,	75
39	English,	77
384	Parisians, from 12th to 19th century,	79.45
40	Italians,	81.80
130	Austrian Germans,	82.00
100	South Germans,	83.00

II. MONGOLOIDS.

101	Eskimo (Bessels),	71.37
21	Eskimo, of Greenland,	71.71
11	Asiatic Eskimo (Dall),	79.5
6	N. W. American Eskimo (Dall),	75.1
5	Aïnos (perhaps not Mongoloid),	76.00
15	Aleutians (Bessels),	78.00
27	South Americans,	79.16
36	North Americans,	79.25
11	Mongols, various,	81.40
10	Indo-Chinese (Malayo-Chinese),	83.51
5	Finns,	83.69
30	Lapps, from Scandinavian Museums,	84.93
11	Lapps,	85.07
4	Esthonians,	90.39

III. NEGROES.

4	Joruba Negroes,	69
12	Dahomey Negroes,	72
4	Zulu Kaffirs,	72
8	Kaffirs,	72.54
17	Negroes,	73
85	Negroes, of Western Africa,	73.40
17	Negroes, of Equatorial Africa,	76

IV. HOTTENTOTS AND BUSHMEN.

18	Hottentots and Bushmen,	72.42
4	Bushmen,	73
3	Hottentots,	76

V. AUSTRALIANS.

15	Australians (Davis),	71
27	Australians,	71.49

VI. PREHISTORIC CRANIA.

19	Troglodytes, of La Lozère (Polished Stone *),	73.22
5	Cro-Magnon and Paris diluvium,	73.34
54	Dolmens, of North of Paris (Polished Stone),	75.01
26	Dolmens, of La Lozère (Polished Stone),	75.86
44	Troglodytes, of de la Marne (Polished Stone),	78.09
16	Troglodytes, of L'Oise (Polished Stone),	79.50

These tables show: (1) The Noachites are all brachycephalic, except the Irish and English, who are mesocephalic. (2) The Mongoloids exhibit a remarkable range, nearly all being brachycephalic, and the northern Mongoloids excessively so, except the Eskimo, who are the only dolichocephalic type among them, and the doubtful Aïnos, who are mesocephalic. The Mongoloids present the highest brachycephalism known (in the Esthonians), and at the same time almost the highest dolichocephalism known (in the Eskimo). These are divergences of racial value. (3) The Negroes are all dolichocephalic, except certain mesocephalic

* Prehistoric time in Europe has been divided as follows:

STONE AGE.
Palæolithic or Rude Stone Epoch.
Reindeer Epoch.
Neolithic or Polished Stone Epoch.
BRONZE AGE.
IRON AGE.

tribes of the interior. (4) The Hottentots and Bushmen range from dolichocephalic to mesocephalic. (5) The Australians are dolichocephalic to a marked extent. (6) The prehistoric tribes of Europe, as before stated,* range, like the Mongoloids, from dolichocephalic to brachycephalic.

The "cranial index" is obviously a very imperfect measure of relative racial characteristics. It does not consider what proportion of the length is frontal and what occipital. Two crania with the same index may possess very different intellectual characteristics; as two crania of the same index may possess extremely different "capacities," or two crania of extremely different indices may possess the same capacity. Apparently a comparison of measurements from the auditory orifice on one side, around the frontal region, to the auditory orifice on the other side, would furnish valuable data. These might be compared with measurements around the occiput. Both measurements combined with the index of breadth would eliminate the relative intelligence with some degree of definiteness.

To supply the deficiencies of the cranial index, anthropologists have resorted to various systems of "radii," proceeding from the center of the auditory meatus to the projection of the most prominent parts of the cranium. The following table presents results of measurements in two races:

AURICULAR RADII.

	355 Parisians.	Negroes.
Alveolar radius (to base of upper incisors),	99.0	113.7
Nasal radius (to root of nose between the eyes),	89.3	95.7
Supra-orbital radius (to middle of superciliary ridge),	98.3	103.0

* See chapter x.

	355 Parisians.	Negroes.
Bregmatic radius (to highest point on top of skull),	111.6	109.8
Lamboidal radius (to upper edge of occipital bone),	104.6	101.2
Iniac radius (to ridge on posterior base of cranium),	76.9	75.0
Opisthiac radius (to posterior border of foramen magnum),	42.3	42.6

M. Broca has aimed at similar results by another method, which gives the relative proportions between the projection of the whole head, viewed from the side, and the facial, anterior and posterior portions of the projection respectively. The facial portion is the part in front of a perpendicular let fall from the supra-orbital point, on the alveolo-condylar plane. The anterior portion of the head lies between this and a vertical line erected from the middle of the great foramen. The posterior portion of the head lies behind the same line. The following are Broca's results, the whole projection of the head being 1000:

	Europeans.	Negroes.	Difference + or − in Negroes.
Projections of the face,	64.8	137.5	+72.7
Projections of anterior cranium,	409.9	361.0	−48.9
Projections of posterior cranium,	525.2	501.3	−23.8

From such measurements M. Broca concludes: (1) The face of the Negro occupies the greater portion of the total length of the head. (2) His anterior cranium is less developed than his posterior, relatively to that of the White. (3) His occipital foramen is situated more backward in relation to the total projection of the head, but more forward in relation to the cranium only. In other words, the Negro has the cerebral cranium

less developed than the White; but its posterior portion is more developed than the anterior.

Another important ethnological character is prognathism, or projection of the face, and especially the jaws, beyond the vertical plane which coincides with the forehead; but different authors have located these lines somewhat differently. In the following tables the horizontal plane extends from the bases of the front teeth in the upper jaw to the lower surface of the occipital condyls, by which the cranium is articulated with the first vertebra. This is called the alveolo-condylar plane. The central line of this plane is used. The other line extends from the same "alveolar point" at the base of the upper incisor teeth, to the "subnasal point" at the base of the opening of the anterior nares. The angle of prognathism is at the alveolar point. This is the method of Lucæ, adopted by Topinard, and varies but little from Broca's method.*

PROGNATHISM.

I. NOACHITES.

76	Auvergnians, France,	77°.18
350	Parisians,	78°.13
22	Gauls,	80°.87
15	Corsicans,	81°.28

II. MONGOLOIDS.

45	Malays,	69°.49
10	Eskimo,	71°.46
2	Asiatic Eskimo (Dall),	72°.5
2	N. W. American Eskimo,	74°.0
14	Chinese,	72°.00
7	Finns and Esthonians,	75°.53

III. NEGROES.

52	Negroes, of West Coast,	66°.91

* Topinard, *Anthropology*, p. 277 et seq.

IV. HOTTENTOTS AND BUSHMEN.

7 Namaquans and Bojesmans, - - - 59°.58

V. AUSTRALIANS.

11 Australians, - - - - - - 68°.24

VI. PREHISTORIC.

14 From Cavern of l'Homme Mort. - - 79°.77

VII. AVERAGES.

White Race, - - - - - - - .82° to 76°.5
Yellow Races (Asiatic Mongoloids), - 76° to 68°.5
Black Races, - - - - - 69° to 59°.5

These numbers speak for themselves. Prognathism is a character which presents less range than the cranial index, within race limits. All Noachites possess a higher angle than the averages of any other race. The lowest of the Mongoloids are higher than the highest of the Black races. The Hottentots and Bushmen possess a degree of prognathism which is extreme and even frightful.

I add a few other anatomical characters. In the Negro skull the sphenoid does not, generally, reach the parietals, the coronal suture joining the margin of the temporals. The skull is very thick and solid, and is often used for butting, as is the custom of rams. It is flattened on the top, and well adapted to carrying burdens. The *clavicle* is longer in proportion to the *humerus* than in the White. His *radius* is perceptibly longer in proportion to the *humerus*—thus approximating to that of the ape. The *scapula* is shorter and broader. A character of the *humerus*, or arm-bone, was remarked by Cuvier, which approximates the Bushman to monkeys, dogs and other carnivores, as well as the wild boar, the chevrotain and the daman. It was the non-ossification of the wall separating the

anterior cubital fossa from the posterior fossa of the humerus — something which will be intelligible to persons versed in anatomy. The *pelvis* in the Negro is narrower than that of the White, and yellow races. In adult Negroes, the *pelvis* measures from 26 to 28 inches in circumference; in Whites, from 30 to 36. The pelvis is also more inclined.

The *arm* is shortest in Whites, longest in Negroes, and intermediate in mulattoes.

In 10,876 American soldiers, the middle finger, when the arm was suspended, reached to the knee within 7.49 per cent. of the body's length; in 863 mulattoes, 6.13 per cent. of the body's length; in 2,020 Negroes, 4.37 per cent. of the body's length; in 517 Iroquois Indians, 5.36 per cent. of the body's length.

Frequently, among the Negroes, the middle finger touched the patella; once it was 12 millimetres below its upper border, as in the gorilla.*

The following are weights of brains in some of the principal races, in grammes.

	No. of Men.	Wt.	No. of Women.	Wt.	Mean Weight.
Europeans, - - -	241	1,375	106	1,217	1,296
Negroes, - - - -	17	1,208	4	1,149	1,178
Hottentots, - - - -			2	974	
Australians, - - -			1	907	

One of the most important of racial distinctions is the relative density of the cerebral substance. It has not been possible, as yet, to reach exact results in this particular; but it is ascertained that the brain of the Germans is less dense than that of the European nations generally; and it is agreed that the quality of the brain in inferior races is not equal to that of the superior races.

* Topinard, *Anthropology*, p. 335.

Among Negroes, the cerebral substance is not so white as among Europeans. Among inferior races, the convolutions are larger and less complex. In the Bushman Venus (so-called), dissected by Cuvier, the superior frontal convolution was not unfolded.

FIG. 19. A common Hawaiian woman; very characteristic. From a photograph received from Rev. S. E. Bishop, of Honolulu.

Among the Negroes, the capacity of the lungs is less than among the Whites; and the circumference of the chest is less. The legs are more slender, the calf

is smaller, and placed at a higher elevation. The thinner muscles are a general characteristic, as may also be seen in the arm. The heel is more projecting and the arch of the foot is less. As to the pilous system, it is deficient in the Negro. The hairs of the head are black and crispy, with a flat transverse section, and are inserted vertically in the scalp. The Mongoloids have coarse, straight cylindrical hair. The nose of the Negro is wide and flat; the jaws are wider than in Europeans, and hence the teeth are less crowded and more regular. The skin is black, velvety and comparatively cool.

Between the form of the upper lip of the Negro and that of the Polynesian, a very perceptible and charac-

FIG. 20. Outline of the muzzle of the Polynesian.

FIG. 21. Outline of the muzzle of the Negro. Compare also the Hottentot, Fig. 46.

teristic contrast exists, to which my attention has been called by Rev. S. E. Bishop, of Honolulu. In the Hawaiian, the skin of the upper lip seems a little too short, and the lip is consequently lifted up from the lower into a semi-horizontal position; and this retroversion extends well toward the angles of the mouth. The inner skin of the lip, meantime, is ample. This is well illustrated in the Hawaiian woman here shown. (Fig. 19.) In the Negro, this deficiency in the skin of the upper lip does not exist. Its position is there-

fore more declined. The inner skin, nevertheless, is often more ample than in the Polynesian, and the lip is thicker. The more retreating chin of the Negro contributes to the formation of a more projecting muzzle. The contrasts are shown in the two accompanying outlines.

2. Physiological Comparisons. "In the Negro, the development of the body is generally in advance of the White. His wisdom-teeth are cut sooner; and in estimating the age of his skull, we must reckon it as at least five years in advance of the White." This accelerated development is illustrated in the comparative strength of Whites and Negroes at the same ages. At seventeen years of age, the strength of back in the White is 114 kilograms; in the Negro, 131 kil. At twenty years, the strength of the White is 150 kil.; of the Negro, 140 kil. At twenty-five years, that of the White is 166 kil.; of the Negro, 155 kil. The Iroquois Indians exceed all races in the strength of the back, which attains 190 kil. In the Hawaii Islanders, it is 171 kil.; in the French, 160 kil.; in Mulattoes, 158 kil.; in 6,381 white soldiers, 155 kil.; in 1,600 Negroes, 146 kil.; in 57 Chinese, 111 kil.; in 30 Australians, 100 kil. In manual strength, however, the French stand 60.0; while Chinese, French seamen, white soldiers, white American seamen, Negroes, Mulattoes, and Iroquois Indians, all stand at 46.8. Even Australians reach 48.

The temperament of the Negro is more sluggish than that of the white man. In Africa, the Negroes are extremely indolent, and use little exertion for their well-being.* Every person who has resided in the midst of a Negro population in our Southern States has been compelled to remark their incapability of intense effort,

* Topinard, *Anthropology*, p. 395.

and their constitutional sleepiness and slowness. This inability to make great exertions secures them from fatigue, and diminishes the demand for regular periods of total repose and invigorating sleep. In a true sense, they are in a state of partial sleep during the day, and hence are able to pass night after night without a total suspension of their usual activity. The constitutional slowness and indolence of the Negro condition the progress of all business in which they are employed, create the necessity of waiting for his motions, and finally induce in the life of the Whites who are dependent on Negro service a similar sluggishness and slouchiness. In respect to activity, industry and enterprise, the habits of the Negro have not improved with his improved freedom and self-dependence. In slavery, coercion prompted to some regular occupation, however inefficient; in a state of liberty, the Negro exercises his right to live in idleness until he becomes the abject slave of want.* It is said that the Negro population in America experiences a much higher rate of mortality, since he enjoys the privilege of taking care of himself, than when it was the duty and interest of his master to provide for him. The next census will give us certain information on this point. These are only *general* statements, and do not, of course, imply that there are no Negroes who are industrious, thrifty and healthy. As general statements, whose truth can be easily substantiated, even in the presence of Aryan civilization, they point out deep-seated and ineradicable race-characteristics.

The disparity between the Negro and the White

* The writer's observations on the Negro in slavery were made chiefly in Alabama, Mississippi and Louisiana. Since their emancipation he has known them personally in Kentucky in 1867 and 1868, and in Tennessee in 1876, 1877 and 1878.

races is brought out in the relative magnitude of the doses of medicine usually demanded by them. Dr. J. Hendree, now of Anniston, Alabama, writes, under date of August 30, 1878: "Let me mention one fact especially, drawn from my own experience of forty years. The coarseness and insensibility of their [the Negroes'] organization makes them require about double the dose of ordinary medicine used for the Whites. To the Mulatto I give less than to either. It is a delicate race." Again, under date of September 12, he writes: "I am now practicing for the Woodstock Iron Co., on about 800 hands, equally divided between the two races, and I find the rule to hold perfectly good. Negroes are not satisfied with small broken doses. When I give a drastic cathartic they are pleased, and generally return to the office to tell me that the dose affected them severely, but 'did 'em lots of good.' Among the overseers on Alabama cotton plantations, who had to deal out a good deal of calomel, quinine, salts, etc., 'horse-doses for Negroes' was a common saying. This is a rough way of putting it, but the fact remains the same." I have been personally acquainted with Dr. Hendree for many years, and I can vouch for his large intelligence and thorough education. Similarly, Dr. M. L. Barron, of Drayton, Georgia, writes, November 1, 1878: "I have practiced among the Negroes over forty years . . . Your information in respect to the doses of medicine for the colored people corresponds with my experience — except as regards opiates; and perhaps they will bear large quantities of these, as I have known some to take very large doses with impunity." * Dr. Mosely says:

*Both these correspondents refer to Dr. Cartwright, formerly of Natchez, and afterward of New Orleans, as the author of one or more publications on this subject, and a contributor to the once

"Negroes are void of sensibility to a surprising degree. They are not subject to nervous diseases. They sleep soundly in every disease, nor does any mental disturbance ever keep them awake. They bear chirurgical operations much better than white people; and what would be the cause of insupportable pain to a white man a Negro would almost disregard." *

The feebleness and perishableness of the Mulatto, to which reference has already been made in chapter vi, is to be regarded as further proof of the physiological distance between the Negro and White races. Much has been written on this subject,† though the proposition has been disputed, and I shall not enter upon the discussion at present, further than to make two citations. Dr. Barthold Seemann, writing of the mixed races of the Isthmus of Panama, says: "The character of the half-castes is, if possible, worse than that of the Negroes. These people have all the vices, and none of the virtues, of their parents. They are weak in body, and more liable to disease than either the Whites or other races. It seems that as long as pure blood is added to the half-castes proper, when they intermarry only with their own color they have many children, but they do not live to grow up; while in families of unmixed blood the offspring are fewer but

famous work "Cotton is King." None of his writings are accessible to me at present. Dr. Barron refers, also, to Rev. Dr. Hamilton, "The Friend of Moses" [New York, 1852], as touching on the same topic. This work is contemptuously handled by Nott and Gliddon. Dr. Hendree refers to the German physiologist Müller, and a work by Count Gobineau, translated and edited by Dr. J. C. Nott, late of Mobile.

*Mosely, *Treatise on Tropical Diseases.*

† See, for example, the paper of Dr. Kneeland, from which I have already cited, on page 84. This is a scientific paper "On the Sterility of many of the Varieties of the Domestic Fowl and of Hybrid Races Generally," in *Proceedings American Association*, 1855, p. 246.

of longer lives. As the physical circumstances under which both are placed are the same, there must really be a specific distinction between the races, and their intermixture be considered as an infringement of the law of nature."* As a second citation I desire to place on record the intelligent original testimony furnished by Dr. Hendree, already quoted. After stating that Mulattoes generally marry persons of pure or nearly pure Black blood, he adds: "As a race, they are incapable of the labor and endurance of the Negro, and, before the war, brought lower prices, except for indoor occupations, as waiters, barbers, etc. When they breed in-and-in by intermarriage among themselves, scrofula and degeneration of tissue rapidly show themselves, offspring become less numerous, and I believe the reproductive power would die out. I have had, in cases in the second generation, to deal with ulcers on the cornea, swellings of the neck, enlargement of glands, and the indolence and feebleness usually accompanying the lymphatic temperament. They are not fitted for hard labor, and not very self-sustaining. My own observations lead me to believe that they are becoming less numerous since the war."†

* Seemann, *Narrative of the Voyage of H.M.S. Herald*, 1845–51, London, 1853, Vol. I, p. 302. See the similar testimony of Baron von Tschudi, cited previously on page 83.

† Dr. J. C. Nott states, correspondingly, "They [mulattoes] are less prolific than the parent stock; which condition is coupled with an inherent tendency to run out, so much so that mulatto humanity seldom if ever reaches, through subsequent crossings with white men, that grade of dilution which washes out the Negro stain." (Nott and Gliddon, *Types of Mankind*, p. 402.) Mr. C. L. Brace (*Races of the Old World*, pp. 484–489) has given such conclusions a quasi-contradiction; but any one examining his statements and facts will recognize their inaptness and inconclusiveness. For instance, he cites the increase of mulattoes in the island of Cuba as evidence of mulatto fecundity. Any one will reflect, instantly, that such increase may

The exemption of the Negro from malarial diseases, from yellow fever, nervous diseases, and sundry other pathological affections of the White race, is another significant diagnostic. "If the population of New England, Germany, France, England, or other northern climates, come to Mobile," says Dr. J. C. Nott, late of Mobile, "or to New Orleans, a large proportion dies of yellow fever; and of one hundred such individuals landed in the latter city, at the commencement of an epidemic of yellow fever, probably half would fall victims to it. On the contrary, Negroes, under all circumstances, enjoy an almost perfect exemption from this disease, even though brought in from our northern states; and, what is still more remarkable, the Mulattoes (under which term we include all mixed grades) are almost equally exempt. The writer has witnessed many hundred deaths from yellow fever, but never more than three or four cases of Mulattoes, although hundreds are exposed to this epidemic in Mobile." This curious phenomenon is probably to be explained,

arise from new crosses as well as from interbreeding of mulattoes. He cites Humboldt's observations showing that the mulatto, in Mexico, is longer lived than the cross between the Indian and the Negro. This does not touch the question of vitality of mulattoes compared with Negroes or with Whites. The case was different in Brazil; but here the Negro was in a climate hot and malarious, like his own, while the white population had to contend with unwonted adversities. This principle is recognized by Brace himself, in reference to Java. Again, the relative prolificacy of different unions, observed by Quatrefages in South America, shows only that mulatto crosses *inter se* and *ab extra* produce numerous offspring — something already notorious in the United States; but no light is thrown on the health and longevity of these broods. If the crosses between Indians and Whites are physically superior to the pure Indians, it must be remembered that the Indians are a branch of the Mongoloid race, to be regarded as much more closely affiliated to the Whites than the Negroes are. But the whole question is covered by the competent testimony of Von Tschudi and Dr. Seemann, already cited.

like the requirement of larger doses of medicines, by the constitutional indolence and insusceptibility of the vital organism of the Negro.

3. Psychic Comparisons. Simultaneously with a fundamental identity of anatomical and physiological characters, the races are widely and sufficiently distinct in details. This is also the state of the case when we compare them psychically. Every department of the psychic nature is possessed by Mongoloids, Negroes and Australians. Every race and every condition is characterized by some degree of intellectual activity, by some form of manifestation of the social sentiments, and by some degree of a moral and religious consciousness. But races differ both widely and ineradicably in the relative strength and influence of the various powers of the soul. The Mongoloids, generally, are cold and passionless, and lack in a sense of the mirthful; but their patience is exhaustless, and their intellect easily grapples with mathematical conceptions. Among the Negroes the perception of music is strongly marked, and rhymes and rhythm are found peculiarly agreeable. The Negro is imitative and the circumstantial memory is good; but the power of attention and the perception of logical relations are very feeble. The social sentiments are predominating. The religious emotions are notoriously strong and susceptible; but these are not accompanied by any adequate intellectual conceptions. In fact, Negro worship, from the Lualaba to the Santee, is a brainless voluptuousness of religious emotion. In their native country their worship is directed toward idols and fetiches, as the media of communication with a supreme power, and with other good and evil spirits. In respect to intellect, they are both sluggish and incapable. The same indolence which controls their bodily

actions affects, also, their mental movements. Statements, to reach their apprehension, must be many times repeated. In the pursuit of education the limit of their powers is generally reached with the ability to read painfully. They seldom pass intelligently through the elementary methods of arithmetic. Their mental sluggishness and lack of grip is manifest in their universal want of exactness in manipulation, perception and thought; and in their heedlessness, blunders and innumerable accidents. It is revealed not less in their inability to master a correct pronunciation of their native (English) language. These mental obtusities react upon the white populations who wait for the service of the Negro. They learn to be contented with loose and shambling results, and finally forget that better results are possible.

The mental indolence of Negroes is further shown in the comparative records of insanity and idiocy. While among Whites, mania occurs in the proportion of 0.76 per thousand, among Negroes it is only 0.10 per thousand. While idiocy, among the former, is 0.73 per thousand, among the latter it is 0.37 per thousand.*

* Topinard, *Anthropology*, p. 413. I am glad to note that many exceptions exist to these general statements concerning the constitutional indolence and mental sluggishness of the Negro race. So far as my observation goes, however, they occur in individuals possessed of some, generally a large, infusion of White blood. I have sometimes, when visiting Fisk University, at Nashville, looked with admiration upon some of the magnificently formed heads which are there working, under all the discouragements of social repression, for knowledge, culture and high respectability. My sympathies have been deeply moved at the evidences of their earnestness and conscious strength, coupled with a keen and crushing perception of the weight of the social ban which their race brings upon them. I will not refrain from expressing here the hope that such cases may receive every encouragement and mark of appreciation. The ostra-

In confirmation of the view here presented of Negro sluggishness and incapacity, I cite the testimony of an experienced teacher among the Freedmen,* under the auspices of the "Freedmen's Aid Society." He says: "In early life I had conceived a horror of slavery in all its forms, and had long held to the opinion that the Negro, once free, and having a fair opportunity, would surely make rapid progress toward becoming a good and honorable citizen. I expected a good deal more than I have found." After narrating the extent and variety of his experiences in New Orleans, Huntsville (Alabama), and Nashville, he gives his conclusions as follows: "As a rule, the Negro does not learn as well as do the children of this state (Ohio). Some things they seem to master readily; but when they come to any reasoning they usually fail. They read well if they have a good teacher, and nearly all write well. In arithmetic, grammar, geography and the higher branches, they are mostly very deficient. They learn definitions tolerably well, but fail in the application. In arithmetic, a class may learn a method of solving examples, and will work with them with wonderful facility. You pass on a week or so with the class, come to a place requiring the use of the principle formerly learned, and it is all gone. I had in my

cism of mere color is both unchristian and irrational. Intellect, honesty, noble aspirations, demand recognition under every skin, of whatever hue. And I will here do Southern people the justice to testify that I have seen the black man among them, when possessed of these qualities, made the recipient of honors and respectful consideration of a most touching character. Let every aspiring colored man or woman take courage. The presence of unobtrusive aspiration proves that the incubus of race is absent.

* William Morrow, Chesterville, Ohio, in *The Transcript*, published by the students of the Ohio Wesleyan University, Delaware, Ohio, Oct. 1878.

charge a class in arithmetic that had been half way through the book; upon examination, I found that not a single one of them could work an example in long division. . . . Some of those who are teaching, of course, are much more intelligent, many being able to teach arithmetic as far as decimals and interest. I meet very few who know anything about grammar. . . . Fear is usually the only thing that controls them. Very few of the finer feelings find any lodgment in their natures. Having been once taught to obey, they do moderately well. The coarse nature is easily aroused, and they have never heard tell of such a thing as self-control. Their anger knows no bounds, often attacking a teacher in open school. . . . A Negro knows no bashfulness; no feeling of diffidence in the presence of superiors ever troubles him. If accused of anything, they assume a look of injured innocence that would credit the veriest saint in the calendar. They never plead guilty, and have an excuse for any and all occurrences."

It was the theory of Prichard,* the father of ethnology, that all race distinctions are due to the influence of surrounding conditions. The color of the skin, especially, was thought to sustain a close relation to climate. It is the opinion, also, of believers in the derivative

*James Cowles Prichard, *Researches into the Physical History of Man*, 1st ed., 1 vol., 1813; 2d ed., 2 vols., 1826; 3d ed., 5 vols., 1836 to 1837. Also *The Natural History of Man*, 4th ed., edited and enlarged by Edwin Norris, 2 vols., 1855. Prichard, following Cuvier, was the great champion of *monogeny*, or the doctrine of the unity of the human species. Etienne Geoffroy St. Hilaire, Virey, Bory de Saint Vincent and A. Desmoulins were the early defenders, after Lamark, of the theory of *polygeny*, or diversity of human species. This view has been most ably defended by L. Agassiz and J. C. Nott. Since the era of Darwinisn, the question has lost its interest.

origin of man, as well as of the different races, that environment is a condition to which organization seeks always to adapt itself. The unlimited correlation between organism and environment has been denied only by those who maintain the doctrine of the fixity of specific forms, and recognize in human races a certain number of permanently distinct species. The views of the old monogenists and the modern derivationists differ, however, in respect to the amount of *time* required to induce fixed physical distinctions of racial value. The monogenists maintain, generally, that all mankind now existing are descended from Noah, and hence that all divergences have come into existence within a period reaching back about 2500 or 3000 years before the Christian Era. The derivationists, on the contrary, hold that this allowance of time is quite insufficient. They maintain that organic transmutations are so gradual, and the remoteness of established racial distinctions so great, that we are required to assume a much higher antiquity for the existence of those races most divergent from the Mediterranean race.

This position is sustained by all our recent observations on the distribution of races in respect to climate and other conditions. Color is the character observed to yield most readily to the impression of climate. But when we attend carefully to the climatic distribution of colors, we find the correlation between color and climate to be very far from exact. This is not the place to enter upon a general discussion of the subject, but I will cite a few facts. The yellow-tawny-Hottentots live side by side with the black Kaffirs. The ancient Indians of California, in the latitude of 42 degrees, were as black as the Negroes of Guinea; while in Mexico were tribes of an olive or reddish complexion, relatively light. So in Africa, the darkest Negroes

are at 12 or 15 degrees north latitude; while their color becomes lighter the nearer they approach the equator. "The Yoloffs," says Goldberry, "are a proof that the black color does not depend entirely on solar heat, nor on the fact that they are more exposed to a vertical sun, but arises from other causes; for the farther we go from the influence of its rays, the more the black color is increased in intensity." So we may contrast the dark-skinned Eskimo with the fair Kelts of temperate Europe. If it be thought that extreme cold exerts upon color an influence similar to that of extreme heat, we may compare the dark Eskimo with the fair Finns of similar latitudes. Among the black races of tropical regions we find, generally, some light colored tribes interspersed. These sometimes have light hair and blue eyes. This is the case with the Tuareg of the Sahara, the Affghans of India, and the aborigines of the banks of the Orinoco and the Amazons. The Abyssinians of the plains are lighter colored than those of the heights; and upon the low plains of Peru, the Antisians are of fairer complexion than the Aymaras and Quichuas of the high table-lands. Humboldt says: "The Indians of the torrid zone, who inhabit the most elevated plains of the Cordillera of the Andes, and those who are engaged in fishing at the 45th degree of south latitude, in the islands of the Chonos Archipelago, have the same copper color as those who, under a scorching climate, cultivate the banana in the deepest and narrowest valleys of the equinoctial region."

The condition of the hair is found to sustain relations to climate no more exact than the complexion. The Tasmanians, in latitude 45°, had hair as woolly as that of the Negroes under the equator. On the contrary, smooth hair is found extensively in tropical

latitudes, as among the Australians, the Blacks of the Deccan (India), and the Himyarites of the Yemen, in Arabia. Here are cases where, if heat is the cause of racial distinctions, it must have exerted its influence on the skin and not on the hair.

Similar absence of correlation between stature and the environment has been ascertained. On the whole, it appears that race-characters have been conferred under conditions and through influences different from those which surround the various tribes of men in our own times. While we cannot deny that organism has been coadapted to environment in the progress of ages, it is true that characters finally acquired persist with a wonderful degree of changelessness from age to age, and under the broadest diversity of physical conditions. From the date of the earliest records the Jew has been a recognizable Jew, the Negro has been distinctly a Negro, and the Egyptian, and the Aryan and the Abyssinian have stood forth as completely differentiated as they appear to be at present. This is the fact which next demands consideration.

CHAPTER XII.

BIBLICAL ANTIQUITY OF RACE DISTINCTIONS.

WHEN Cain, according to the biblical account, was convicted before Jehovah of the murder of his brother, he was banished as "a fugitive and a vagabond" from the land of his parents. The culprit, reflecting on the condition to which he had been doomed, exclaimed, "My punishment is greater than I can bear. . . . *Every one that findeth me* shall slay me. And Jehovah said unto him, 'Therefore, *whosoever slayeth Cain*, vengeance shall be taken on him sevenfold.' And Jehovah set a mark upon Cain, lest *any finding him* should kill him. And Cain departed and dwelt in the land of Nod, on the east of Eden." It is next mentioned, in the continuation of the narrative, that Cain had *married a wife*, and a son had been born whose name was KhaNOK (Enoch). Cain is next reported to have *built a city*, which he named after his son. From Enoch descended generations represented by Irad, Mehujaël, Methusaël and Lamech, who *married two wives.* Jabal, the son of one wife, "was the father of *such as dwell* in tents, and [of such as have] cattle." Jubal, his brother, was the father of *such as handle* the harp and organ. The other wife bore Tubal Cain, "an instructor of every artificer in brass and iron." *

Following out, in another place, the line of the

* Gen. iv, 12–22. The Enoch descended from Seth is also KhaNOK, Gen. v, 18, 19. The root of the name is KhâNaK, *to straiten, to initiate or dedicate.*

Adamites, and their contemporary annals, the sacred account informs us that "When men began to multiply on the face of the earth, and daughters were born unto them, that the sons of God saw the daughters of men that they were fair, and took them wives of all which they chose," and the children of such unions [became] mighty men which [were] of old men (ENo-ShI) of renown.*

Now, I think that a natural and unsophisticated interpretation of the foregoing biblical statements demonstrates that they imply the existence of pre-adamites.

1. Cain recognizes the existence of some people in the regions remote from Eden, from whom he might apprehend bodily danger. He does not anticipate this because they would recognize him as an offender, but because he would be a foreigner and a stranger.

2. Jehovah recognizes the existence of a foreign people, and the danger to which Cain would be exposed, and provides some means by which he would be protected from the effects of intertribal or interracial antagonism.

3. Cain went toward the east, into the region which I suppose to have been peopled, at this time, either by one of the Black races then still spread over the earth, or, much more likely, by the primitive Dravidians, or primitive Mongoloids, who still maintain, in their descendants, a powerful foot-hold in all the contiguous region. The opinion has been advanced that the Mongoloids are a mixed or mulatto race descended from Cain and a black wife.† But this is a conjecture not sustained by anthropological evidence.

* Gen. vi. 1, 2, 4.

† Ariel [B. H. Payne, Nashville, Tenn.], *The Negro, What is his Ethnological Status?* 2d ed. enlarged, with a review of his review-

4. Cain found his wife in the region to which he removed. On the current pseudo-orthodox, or pseud-orthodox, interpretation, we are deprived of this decent alternative. Cain must have married his sister or his niece, and the married woman must have fol-

ers, exhibiting the learning of the learned. Cincinnati, 1872, 12mo, pp. 172. The opinion cited above may be found expressed on pp. 105, 107 and elsewhere. That the Canaanites also resulted from a cross with the Negro is asserted on pp. 106, 113, 126. This is a curious, even a phenomenal, production, containing much suggestive matter almost inextricably mixed with a mass of mere rubbish. The work is full of vain repetitions, and its style is exceedingly tedious. The author perpetually wanders from the point to indulge in reflections mostly of an insulting character toward those who disagree — especially if "learned men." It seems to be the work of an ignorant, conceited, but strong-minded man, dogmatic, pragmatic and captious to excess. The following are some of the positions of the work: (1) That mulattoes run out at "the fifth crossing"— pp. 42, 94. (2) That the translation of the Sacred Scriptures is excessively defective — pp. 97 *et passim.* (3) That the Hebrew lexicons give meanings of Latin and Greek origin — p. 103. (4) That "*ish*" in the Bible means *negro*, "*enosh*" a *mulatto*, and "*anshey*," one three-fourths white — pp. 104, 118, 134. (5) That the Chinese and Japanese are a third cross with the Negroes — pp. 105, 107. (6) That the Canaanites of Palestine are a cross with the Negro — pp. 106, 113, 126. (7) That the "land of Nod" means "the land of vagabonds"— p. 109. (8) That Cain's son was Enosh and not Enoch — p. 111. (9) That the Negro can amalgamate with beasts — p. 127. (10) That the tempter of Eve was a Negro — pp. 151, etc., 156–8. (11) That the word Ham does not mean *black* — p. 55. To these not irrational assertions may be added the following indefensible opinions: (1) That God has a white complexion — pp. 95, 107, 138. (2) That the world is but 6000 years old — p. 98. (3) That the Deluge was universal — p. 99. (4) That the Negro is not a man — pp. 100, 117 *et passim.* (5) That Adam was not intended to work — pp. 69, 120, 121. (6) That it never rained until the Flood — p. 121. (7) That the aboriginal inhabitants of all lands were mulattoes — p. 126. (8) That fossil remains have been left by Noah's Flood. This synopsis of *points* may be a sufficient introduction to a work which in its day produced a marked sensation. Those who desire to cultivate an acquaintance can procure the book (only) of A. Setleff, Nashville, Tenn.

lowed him into banishment for some unnamed offense. I say "followed him," for at the date of his banishment Adam's daughters are not stated to have been born. Why, unless we gratuitously assume that some near kinswoman of Cain was also banished, should a woman leave her father's family and join herself, in a foreign land, to a convicted and sentenced murderer of her brother? The motive did not exist. No such woman followed Cain. His wife was a woman of the country to which he fled. She was a daughter of the preadamite race. Ethnology would be gratified by the knowledge of the present status and home of her descendants; but we must content ourselves with conjectures.

The conjugal difficulty does not concern Cain alone. He went *abroad* and married. Seth, who remained at home, found his wife—where? Common interpretation compels us to conclude that he married his sister. Possibly he did; and possibly we are all descended from such an incestuous union. But I am of the opinion that if Cain found anywhere a suitable wife, Seth, who was not a murderer, was equally well provided for. He found his mate among the daughters of the Preadamites; so that on one side none of the blood of Adam courses in our veins.

It is proper to suggest, in this connection, that, according to my view, no such racial contrast existed between the family of Adam and the nonadamites as to originate a racial repugnance. Adam, probably, bore a close physiological resemblance to the nonadamites. It is not unscientific to admit that he may have represented a decided and even a sudden step in organic improvement, but I think the chief significance of Adam consists in his being the remotest progenitor to whom the Hebrews were able to retrace their line-

age. The remotest ancestor to them known was to them the first man. I conceive human society, therefore, on biblical evidences, to have presented, at the advent of Adam, an advanced humanity, and a settled and populous condition. This is further implied in

FIG. 22.—A Fair Preadamite of the Chinese family. From a photograph by D. Sewell, Sonora, Cal.

what remains to be said. Adam was a noble and superior specimen appearing in the midst of these Asiatic preadamites, and intermarriages with them were so natural and proper, not to say unavoidable, that the annalist of those times does not deem it necessary even to affirm the existence of other peoples contemporary with the Adamites.

5. Cain built a city. How did Cain build a city with only a wife and baby? Or did the populating of the city await the natural increase of a family? How many citizens is it probable that Cain himself furnished during his life-time? It will be suggested that Enoch probably assisted him; but where did Enoch obtain a wife? Did he marry one of his aunts, or one of his possible sisters? Is it probable that an eligible aunt would give her hand to the son of her brother's murderer? I would reply that Enoch intermarried with the people among whom his father had settled. I would reply that these people entered into the population of the Cainite city. I think such assumption removes all the embarrassments of the absurd traditional dogma respecting the aboriginal humanity of Cain's father.

6. "And Irad begat Mehujael." Who was Mehujael's mother? Was she his aunt, a sister of Irad? Or was she his great-aunt, a sister of Enoch? The popular and traditional interpretation, which calls itself "orthodox," supplies another muddle at this point. As orthodoxy is "right thinking," however, the alliance of all degrees of consanguinity must have been "right" in Cain's family; and not only in Cain's but in Seth's; and not only in Seth's but in the families of those other "sons and daughters" which were born to Adam. That is, a principle of moral right set down as "eternal" in the nineteenth century A.D., did not

exist in the fortieth century B.C. Away with such puerilities! It is too late in the history of thought to have patience with the intrusion of such old dead dogmas. Conviction becomes clearer as I proceed; and even while merely examining the same old text as stupid antiquity pretended to make the basis of its incredible beliefs.

7. Lamech married two wives, Adah and Zillah. Who were these two ladies? And why was Lamech permitted to appropriate both of them in such a time of scarcity? The wrong of polygamy, perhaps, had not yet come into being. Or was the line of Cain permitted or abandoned to indulge in illicit practices? To what line, then, did Jacob belong? And Lamech made confession impartially to both his wives that he had slain a man. Exemplary bimarital candor! But who was this man? Did Lamech slay his father Methusael, or his grandfather Mehujael? Neither is presumable; for these persons, having been named when they came into being, would probably have been honored by mention when they went out of existence. Whom did Lamech violently remove from the population of the city of Enoch? The answer is suggested by the whole context: it was the son of a Preadamite.

8. The "sons of God" married the "daughters of men." What is the meaning of this antithesis?* The "sons of God" plainly belonged to a different people from "the daughters of men." Who, then, were

* "This union is generally explained by the ancient commentators, of a contact with supernatural powers of evil *in the persons of the fallen angels* [!]; most modern interpretation refers it to intermarriage between the lines of Seth and Cain. The latter is intended to avoid the difficulties attaching to the comprehension of the former view, which, nevertheless, is undoubtedly far more accordant with the usage of the phrase 'sons of God' in the Old Testament. Compare Job i, 6; xxxviii, 7."

the "men"? I think it unnecessary to go far for the answer. If we go to the original of the first verse of this chapter, we find it to read thus: "And it was when the ÂDâM began to multiply on the face of the ADâM-âH." Indeed! we have heard of ÂDâM and ADâM-âH before. The "sons of men" were the sons of Adam — the same whom Jehovah Elohim created — the same whose posterity were Seth and Enos, and Cainan and Noah. Who were the "men"? The Bible tells us, further, that Jehovah said, "My spirit shall not always strive with ÂDâM"; and again, that "Jehovah saw that the wickedness of the ÂDâM was great in the earth"; and "it repented Jehovah that he had formed the ÂDâM," and "Jehovah said, I will destroy the ÂDâM whom I have created," and accordingly sent a Flood. The "men" in all these passages were the Adamites.

The "sons of God" are mentioned in antithesis to these; they were *not* Adamites. Nothing is plainer, then, than that they were preadamites. All conceivable humanity must have been Adamic or Preadamic. Why called "sons of God"? Because they were "sons," but not the sons of "men" (or Adamites), and the anthropomorphic conceptions of the Hebrews, who traced all things to God, led them to ascribe young men, whose ultimate ancestry was unknown, to the parentage of the all-producing Jehovah.*

I know of no other rational interpretation of these

* Does any serious objection exist against explaining Job i, 6, and xxxviii, 7, in the same way? "There was a day when the sons of God [people not traceable by the Genesiacal lineage to Adam] came to present themselves before the Lord." In the second passage we have, "When the morning stars sang together, and all the sons of God [intelligences not of the race of Adam] shouted for joy." In this connection it is interesting to note that, according to Aben Ezra and Spinoza, the book of Job is the product of a Gentile pen.

passages.* They imply, with remarkable clearness, that nonadamites were contemporaries of the immediate posterity of Adam. The succession of biblical statements, which I have cited and commented upon, all concur in the clear implication of the existence of nonadamites; and this seems to have been a fact so well known and notorious as not to require formal enunciation by the Hebrew writers.

* I hardly know whether to feel most chagrin or satisfaction at the discovery that the author of *The Genesis of the Earth and of Man* has treated the matter of biblical interpretation in a manner so similar to my own. I have not been able to see that work; and this information was only obtained by re-reading, after an interval of years, M'Causland's *Adam and the Adamite*, which I purposely abstained from consulting until my own views were in writing. I take pleasure in citing from M'Causland some further points made by the anonymous author referred to. "A distinction between *Adam* and *ish*, the one denoting the higher race, and the other as including the lower races of men, is found in various passages of the Scriptures. They are thus contrasted in the following passages: 'Hear this, all ye people; give ear, all ye inhabitants of the world. Both *low and high*, rich and poor together' (Ps. xlix; 1, 2). The words here rendered '*low and high*' are, when literally translated from the original, 'sons of Adam and sons of man' (*ish*). Again, 'Surely, *men of low degree* are vanity, and *men of high degree* are a lie' (Ps. lxii, 9). Here the literal rendering of the Hebrew original of 'men of low degree and men of high degree' is *sons of Adam and sons of man*. In Isaiah we have, 'The *mean man* boweth down, and the *great man* humbleth himself' (Is. ii, 9); the literal translation of the original is 'The *Adamite* boweth down like as *man* (*ish*) humbleth himself.' Again, 'And *the mean man* shall be brought down, and *the high man* shall be humbled' (Is. v, 15), when translated literally is, 'And the Adamite shall bow down, and the *man* (*ish*) shall humble himself.' Similar contrasts are found in Is. xxxi, 8, and Ezek. xxiii, 42." (M'Causland, *Adam and the Adamite*, pp. 172–3.)

CHAPTER XIII.

NON-BIBLICAL ANTIQUITY OF RACE DISTINCTIONS.

THE biblical evidences cited point strongly to the conclusion that in antediluvian times, and even as far back as Cain and Seth, peoples were in existence who were recognized as extra-Adamic. It does not appear that they were distinguished from the Adamites by ethnographic characters which constituted them a distinct "race," in the modern sense of the term; but we are in possession of non-biblical records reaching back nearly to the age of Noah, or perhaps far beyond it, which establish the existence of strongly marked racial divergences in extremely remote, if not in antediluvian, times. The following passage from Topinard * expresses the general tenor of the facts: "Whether assisted or not by archæology, history narrates that, under the Twelfth Dynasty, about 2300 B.C., the Egyptians consisted of four races: (1) The *Rot*, or Egyptians, painted *red*, and similar in features to the peasants now living on the banks of the Nile; (2) The *Namu*, painted *yellow*, with the aquiline nose, corresponding to the populations of Asia, to the east of Egypt; (3) The *Nahsu*, or prognathous Negroes, with woolly hair; (4) The *Tamahu*, Whites, with blue eyes. It tells us that seventeen centuries before our era, Thothmes III, of the Eighteenth Dynasty, carried his victorious arms over a multitude of peoples, among whom are recognized existing types of Negroes of

* Topinard, *Anthropology*, p. 428.

central Africa; and that in the year 1500 B.C., a swarm of barbarians, blonde with blue eyes, came down upon the western frontier of Egypt from the north, while in Europe, at the same moment, an invasion had leaped over the Pyrenees, and banished the Ligurians and Sicanians into Italy, and the Iberians beyond the Ebro, into Africa."

The various family types of the Caucasian or Mediterranean race have been preserved upon the monuments of Chaldæa and Assyria.* Among them we find the Semitic type as distinctly characterized as at the present day. It seems, indeed, to have undergone no change since the earliest records of Mesopotamia. These date back to 600, 800 and 1,000 years before Christ. Persepolitan monuments carry the portraits of the Aryan type back to the sixth century before Christ.

But Egypt leads us back to a more interesting antiquity. It was happily the custom of the Egyptians to produce sculptured and painted portraits of individuals who came to occupy positions of significance in their national history. We thus have likenesses, not only of kings and queens, but of the allies, enemies, captives, servants and slaves of the Egyptian monarchs and people.† I present first a general view.

The four races of men known to the Egyptians of the Twelfth and following Dynasties have been depicted in the celebrated scene from the tomb of Seti-Menephtha I, of the Nineteenth Dynasty, about 1500 B.C. This is commonly called the scene from "Belzoni's Tomb," at Thebes. "The god Horus conducts sixteen person-

* See especially, Layard, *Babylon*, pp. 105, 150, 152, 153, 361, 538, 582–584, 630, etc. Also *Monuments of Nineveh*, 1849, folio, plate. Also Botta, *Monuments de Ninive*; Lepsius, *Denkmäler*, etc. etc.

† See especially the magnificent plates of Rosellini, *Monumenti dell' Egitto*. Also Lepsius, *Denkmäler*.

ages, each four of whom represents a distinct type of the human race as known to the Egyptians." These figures are reproduced in the splendid folio plates of Belzoni, Champollion, Rosellini, Lepsius and others. The reduced figures as here given are from the smaller work of Champollion-Figeac.*

FIG. 23. FIG. 24. FIG. 25. FIG. 26.

The four races of men known to the Egyptians. Fig. 23, *Rot* or Egyptian (*red*). Fig. 24, *Namahu* or Semitic (*yellow*). Fig. 25, *Nahsu* or Negro (*black*). Fig. 26, *Tamahu* or Mediterranean (*white*). Reduced from a portion of a painted relief of the Nineteenth Dynasty, about 1500 B.C.

Fig. 23, together with its three fac-simile associates, represents the typical Egyptians as figured by an Egyptian artist. They are called in the hieroglyphics, *Rot* or Race, and are always colored *red*. The same style of head is repeated very many times on different monuments.

Fig. 24 represents the Semitic type. This is designated *Namahu* in the legend over his head. This type is always colored *yellow*.

* Champollion, *L'Egypte Ancienne*, 1840, Pl. I, and Champollion-le-Jeune's description, pp. 29–31.

Fig. 25 typifies the Negro race, called in the hieroglyphics *Nahsu*, and invariably painted *black*.

Fig. 26 represents the Aryan or Japhetic family, which is designated *Tamahu* in the hieroglyphics, and is always indicated by a *white* color.

The Seventeenth, Eighteenth and Nineteenth Dynasties were peculiarly prolific in iconographic monuments. The Seventeenth Dynasty began, according to Lepsius, at 1671 B.C.—according to Strong, at 1643 B.C.—an unimportant discrepancy. The Pharaonic portraits present a series ranging from pure Egyptian through intermixtures of Grecian, Semitic and Nubian, to nearly pure Hellenic and Jewish. The Nineteenth Dynasty, beginning with Rameses I, about 1526 B.C. (Lepsius) to 1302 B.C. (Strong), furnishes a similar mixture of Egyptian, Greek and Semitic features in the portraits of the kings; and in the Twenty-second, Twenty-third and Twenty-fourth Dynasties, the stock has become so mixed that no distinctive type can be eliminated from the iconographs. It is worthy of note, however, that the so-called "Ethiopian" (Twenty-fifth) Dynasty reveals no Negro blood.* The noses are straight, or slightly Jewish, and the lips and prognathism are strictly Egyptian, while in *Sabaco*, the prognathism is only strictly Aryan. The intermarriages between Egyptian kings and foreign princesses are facts well known to history, and thus the portraits and the annals illustrate each other. The intermixture of Egyptian and Asiatic blood is noted as far back as the Fourth Dynasty, which began, according to Lepsius, 3400 B.C. (Strong, 2269 B.C.), long before the existence of the Abrahamic stock.

* See chapter vii, for various opinions respecting the location of Ethiopia, and the race characters of the Ethiopians.

The representatives of foreign personages show the race characters more sharply defined. One single group of portraits exhibits three distinct types of mankind grasped by a fourth. Rameses II, in the thirteenth or fourteenth century before Christ (that is during the life-time of Moses), was represented, in the temple of Abusimbel, in Nubia, in a group which "symbolizes his Asiatic and African conquests in a gorgeously colored tableau. He, an *Egyptian*, brandishes a pole-axe over the heads of *Negroes*, *Nubians* and *Asiatics*, each painted in its true colors, namely, black, brick-dust, and yellow flesh-color; while above his head runs the hieroglyphic scroll, 'The beneficent, living god, guardian of glory, smites the *South;* puts to flight the *East;* rules by victory; and drags to his country all the earth, and all foreign lands.'" * Among the figures of this group we recognize "one mixed, two purely African and one true Asiatic. These four types existed, then, according to this iconograph, about 1400 B.C. Their geographical range extended "from the confluence of the Blue and White Niles, beyond the northern limit of the tropical rains in Negro-land, down the river to Egypt, and thence to the banks of the Euphrates. Precisely the same four types occupy the same countries at the present day." †

FIG. 27.—Aryan Portrait. From the reign of Rameses II, 1400 B.C.

The Mediterranean race finds ample illustrations in a remarkable number of national types, upon the

* Nott and Gliddon, *Types of Mankind*, p. 153.

† See chapters iii, iv and v.

monuments of Egypt. The head of an Aryan is well shown at the Nubian temple of Abusimbel, dating from 1400 B.C. (Lepsius). The tomb of Seti I, of the Nineteenth Dynasty, 1500 B.C., affords a good likeness of a Himyarite Arab (Fig. 28). Among the prisoners of Rameses III, of the Nineteenth Dy-

FIG. 28.—Portrait of a Himyarite Arab. From the tomb of Seti I, at Thebes, Nineteenth Dynasty, 1500 B.C.

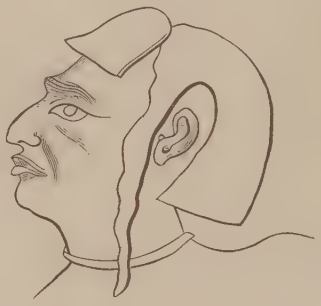


FIG. 29.—Portrait of a (Kurdish?) Asiatic. Rameses III, Twentieth Dynasty, 1300 B.C.

FIG. 30.—Portrait of a Hindu. Thothmes III, Twenty-eighth Dynasty, 1600 B.C.

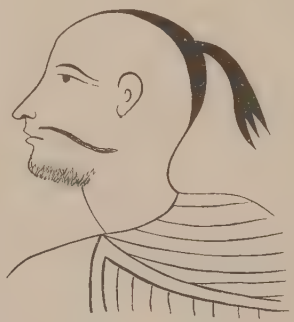


FIG. 31.—Portrait of a Mongoloid. Rameses II, Twentieth Dynasty, 1400 B.C.

nasty, 1300 B.C., is the head of a Kurdish individual apparently from the Taurus chain (Fig. 29). In the Grand Procession of Thothmes III, of the Eighteenth Dynasty, is shown a face and head (Fig. 30), which, from its delicate features and straw hat is generally regarded as Hindoo. These are simply selected examples of the portraits of Aryans and Semites, dating from the temple-building period.

What may be taken for a Mongoloid likeness of the Tatar type, known to the Egyptians during the reign of Rameses II, is depicted on the Pharaonic monuments of the fourteenth century B.C. (Fig. 31). The pure Egyptian type was far more common among the people than among their rulers. The heads of Amunoph II and his mother, however (Figs. 32 and 33), are good Egyptian figures; and the same general expression is extremely common among the industrial classes. The women who officiated as mourners are represented with long hair (Fig. 34); the best of proof that the Egyptians were not Negroes. Sometimes the hair seems to have been dressed in curls (Fig. 35). These portraits date from about 1500 B.C. The oldest portraits as yet known, however, do not vary to any important extent from these of the New Empire. The bas-relief portrait of the prince and priest Merhet (Fig. 36), a relative

FIG. 32.—Amunoph II. From a tomb at Thebes, 1727 B.C. (Champollion, *Monumens*, II, Pl. 160, Fig. 3.)

and probably a son of Shufu, or Cheops, the builder of the Great Pyramid, does not betray that intermedium between Negro and Semitic physiognomy which

Fig. 33.—Mother of Amunoph II.

Fig. 34.—A Female Mourner. Copied from Egyptian monuments.

Fig. 35.—An Ancient Egyptian Lady *coiffée*.

some have imagined. It is purely Egyptian. I have already stated that other portraits of the Fourth Dynasty reveal the existence of a Semitic type. Here, therefore, we have evidence that two family types of the Mediterranean race were extant, according to Lepsius, in the thirty-fourth century B.C.

FIG. 36.—Merhet, Prince and Priest. Fourth Dynasty, 3400 B.C.

Far more interesting, in relation to the present discussion, are the portraits of typical Negroes, still remaining on the Egyptian monuments. The cases already cited demonstrate that the family and national differentiations of the White race had been effected as far back as the Seventeenth and even the Fourth Dynasty. A single figure shows that the Mongoloid type was in existence in the Eighteenth Dynasty. But it also appears that a racial type, as divergent as the Negro, had become fully established at a very remote period. Among the bas-reliefs of Rameses III, of the Twentieth Dynasty, is the figure of

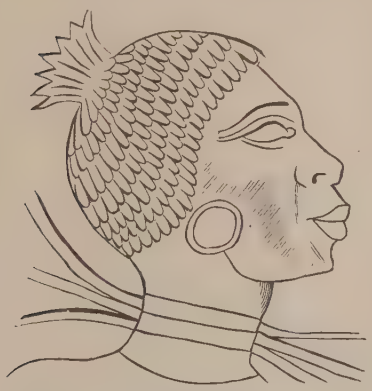


FIG. 37.—Portrait of a Negro. Twentieth Dynasty, 1300 B.C.

a Negro tied by the neck to an Asiatic prisoner (Fig. 37). This head is said to be a fair average representation of the Negroes of Egypt at the present day. It would certainly pass for a Negro in America. At Abusimbel, among so many other delineations, is a double file of Negroes and Nubians, bound and driven before the chariot of Rameses II, of the Twentieth Dynasty (see Fig. 15). Hundreds of other examples of Negroes have been reproduced by Rosellini; but I must content myself with three more examples. The first two of these are Negro prisoners, with halters about their necks (Figs. 38 and 39). The lotus bud at the end of the halter

FIG. 38.—Negro Prisoner. Ancient Egyptian monuments.

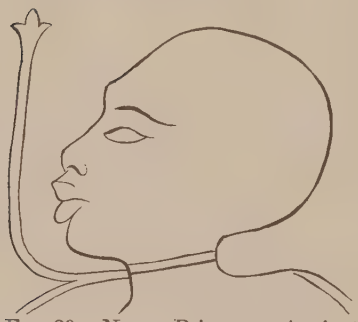


FIG. 39.—Negro Prisoner. Ancient Egyptian monuments.

FIG. 40.—Captive Negress. Reign of Horus, Eighteenth Dynasty, 1550 B.C.

signifies *south*, which was the direction of Negro-land. The last example is the figure of a Negress (Fig. 40), sculptured and painted about 1550 B.C. (Lepsius). Let this figure be compared with the description given by Virgil 1600 years later: "Meanwhile he calls Cybale. She was his only [house] keeper; African by race, her whole figure attesting her father-land; with crisped hair, swelling lip and dark complexion; broad in chest, with pendant dugs and very contracted abdomen; with spindle shanks and broad, enormous feet, her lacerated heels were rigid with continuous cracks." *

The portrait furnished by the Roman poet was anticipated by 1650 years; and both portraits are faithful to the modern Negress, 1830 years later. The human type has not sensibly varied during thirty-four centuries.

Running back to the Twelfth Dynasty, we find numerous inscriptions which attest the existence of the Negro at that date, but no portraits seem to be extant. Lepsius, speaking of the Twelfth Dynasty, says: "Mention is often made on the monuments of this period of the victories gained by the kings over the Ethiopians and Negroes; wherefore, we must not be surprised to see black slaves and servants." † Birch cites mention of Negroes from the Twelfth Dynasty. "A tablet in the British Museum," he says, "dated in the reign of

* Here is the original:

Interdum clamat Cybalen; erat unica custos;
Afra genus, tota patriam testante figura;
Torta comam, labroque tumens, et fusca colorem;
Pectore lata, jacens mammis, compressior alvo,
Cruribus exilis, spatiosa prodiga planta;
Continuis rimis calcanea scissa rigebant.

For this comparison I am indebted to Dr. J. C. Nott, in *Types of Mankind*, p. 255.

† Lepsius, *Briefe aus Ægypten*.

Amenemha I, has an account of the mining services of an officer in Æthiopia at that period. 'I worked,' he says, 'the mines in my youth; I have regulated all the chiefs of the gold-washings; I brought the metal, penetrating to the land of Phut, to the Nahsi [Negroes].' It is probably for these gold mines that we find in the second year of Amenemha IV, an officer bearing the same name as the king, stating that he was 'invincible in his majesty's heart in smiting the Nahsi.' In the nineteenth year of the same reign were victories over the Nahsi." *

The same authority assures us that some information concerning the existence of the Negro can be traced back to the Eleventh Dynasty. "The base of a small statue inscribed with the name of the king *Ra nub Cheper*, apparently one of the monarchs of the Eleventh Dynasty, whose prenomen was discovered by Mr. Harris, on a stone built into the bridge at Coptos, intermingled with the Enutefs, has, at the sides of the throne, on which it is seated, Asiatic *and Negro* prisoners." This takes us back to a dynasty which began, according to Strong, in 2006 B.C., *only 509 years after the end of the Deluge, as assumed by the same authority.* These are the oldest Negro portraits known.

Mr. Birch further states that during the Fourth to the Sixth Dynasty, there are no monuments to show that the Egyptians were even acquainted with the existence of the Negroes. He tells us, however, in a late work, that in the reign of Pepi, second monarch of the Sixth Dynasty, war was carried on against some Asiatic neighbors of the Egyptians, and an army of *Nahsi*, or Negroes, was levied as auxiliaries. "These Negroes, the first mentioned in history, were officered

* Birch, *Historical Tablet of Rameses II*, London, 1852; also *Egypt from the Monuments.*

by the Egyptians, some of whom were priests." This record of these events was found at San or Tanis.*

We are informed by Lepsius that African *languages* antedate even the epoch of Menes, 3893 B.C.

I have thus furnished some indications of the nature of the evidence on which we affirm the very high antiquity of the racial distinctions existing in modern times. The following is a summary of the facts:

1. Race types may be traced back in Chaldæa and Assyria to 800 or 1000 B.C.

2. As early as the Twelfth Dynasty, the Egyptians recognized four races—the Red, the Yellow, the Black and the White. This was B.C. 1643 (Strong), 2300 (Leps.).

3. The Pharaonic portraits of the New Empire present mixed Egyptian, Semitic and Aryan types. The oldest Jewish head (wife of Amunoph I) about B.C. 1671.

4. Such intermixture existed also in the Fourth Dynasty, which began B.C. 2269 (Str.), 3426 (Leps.).

5. Pure Semitic and Aryan types are known in Egypt from iconographs of B.C. 1400 (Leps.).

6. The Mongoloid type was figured in Egypt B.C. 1400 (Leps.).

7. The Nubian type was figured as far back as the Eleventh Dynasty, B.C. 2006 (Str.), 2400 (Leps.).

8. Pure Egyptian types are traced back to the Fourth Dynasty, B.C. 2269 (Str.), 3426 (Leps.).

9. Hundreds of Negro portraits occur from the Eighteenth Dynasty down, B.C. 1492 (Str.), 1550 (Leps.).

10. Negro portraits exist which date from the Eleventh Dynasty, B.C. 2006 (Str.), 2400 (Leps.).

*Birch, *Ancient History from the Monuments, Egypt*, p. 54.

11. Monumental evidences of the existence of Negroes occur in the Twelfth Dynasty, B.C. 1963 (Str.), 2300 (Leps.).

12. Monumental evidences of the existence of Negroes are even found under the Sixth Dynasty, 2081 (Str.), 2190 (Wilk.), 2967 (Leps.).

13. African languages existed before the First Dynasty, B.C. 2515 (Str.), 3892 (Leps.).

CHAPTER XIV.

PREADAMITE RACES.

I WISH now to inquire how such remarkable antiquity of all the racial types of the oriental world bears upon the question of Preadamites. In this inquiry, the following synopsis will be convenient for reference:

TABLE OF FIRST-KNOWN ADVENTS OF HUMAN TYPES.

Race.	Family.	Nation.	How Shown.	Egyptian Designation.	Strong, B.C.	Lepsius, B.C.
WHITE	HAMITIC	Egyptian	Menes	RED	2417	3892
			Iconographs		2269	3426
		Nubian	Mixed	DARK RED	2006	2400
	SEMITIC	Chaldæan	Pure	YELLOW		1000
			Mixed		2269	3426
		Hebrew	Pure		1470	1671
			Mixed		2269	3426
	JAPHETIC	Medean	Pure	WHITE	2166	3000
		Hellenic				
		Scythian				
		Hindoo			1442	1600
MONGOLOID	TATAR				1249	1400
NEGRO			Iconographs	BLACK	2006	2400
			Inscriptions		2081	2967

Now, how do these dates of the complete differentiation of racial and family types compare with the received dates of the creation of Adam and of the Deluge? The nature of the reasoning will appear sufficiently if we follow the "orthodox" chronology of Dr. Strong. He places the end of the Deluge at 2515 B.C. Its beginning was, therefore, 2518 B.C. The interval from Adam to the Deluge was, according to Poole, 2262 years; according to Petavius and general opinion, 1656 years. The generality of opinions

lies between these two numbers. The creation of Adam was, accordingly, somewhere from 4780 B.C. to 4174 B.C.; or, according to Usher's postdiluvian chronology, between 4780 B.C. and 4004 B.C.

Adam, according to Poole,	4780 B.C.
Adam, according to Usher and Strong,	4174 B.C.
Adam, according to Usher,	4004 B.C.
Deluge, according to Poole,	3099 B.C.
Deluge, according to Strong, ended,	2515 B.C.
Deluge, according to Usher,	2348 B.C.

Adopting, for the present, Dr. Strong's arrangement of the Egyptian Dynasties,* which furnishes the first column of dates in the table of first known advents of human types, given above, we may proceed to calculate what were the intervals after Adam and after the Deluge, at which the several types named are known to have been in existence. Such calculation furnishes the following table:

INTERVALS FROM ADAM AND THE DELUGE TO FIRST-KNOWN ADVENTS OF HUMAN TYPES.

Types Designated.	Strong's Egyptian Chronology. B.C.	After Adam.			After Deluge.		
		Poole, Yrs.	Usher-Strong, Yrs.	Usher. Yrs.	Poole, Yrs.	Strong, Yrs.	Usher, Yrs.
[Era of Menes]	2417	2363	1757	1587	682	98	—69
Egyptian	2269	2511	1905	1735	830	246	79
Chaldæan, mixed	2269	2511	1905	1735	830	246	79
Hebrew, mixed	2269	2511	1905	1735	830	246	79
Hellenic, nearly pure	2166	2614	2008	1838	933	349	182
Negro, in inscriptions	2080	2700	2094	1924	1019	435	268
Negro, in iconographs	2006	2774	2168	1998	1093	509	342
Nubian	2006	2774	2168	1998	1093	509	342
Hebrew, pure	1470	3310	2704	2534	1629	1045	878
Hindoo	1442	3338	2732	2562	1657	1073	906
Mongoloid	1249	3531	2925	2755	1850	1266	1099

*See chapter ix.

Now, let us place ourselves, for a moment, on the generally accepted chronology, which we find placed in the margin of our Bible, and which we have been taught and required to receive. Let us not follow any of the so-called "exaggerated" and "skeptical" arrangements of the Dynasties of Egypt, which have been given us by Bunsen, Lepsius, Mariette and other German and French "free-thinkers"; but let us adopt the arrangement which has been fixed to suit the views of an orthodox doctor of sacred theology, a professor in a theological seminary, and published in an orthodox quarterly review. On this basis, we discover that the existence of a well-established monarchy, and well-developed civilization was a fact *sixty-nine years before the Flood—at the same time that it is held that all the world has been settled since the Flood!* Here is the result, exactly as orthodoxy has fixed it. The date of the Deluge was determined by Archbishop Usher, and the date of the Thinite Egyptian monarchy has been determined by Professor Dr. James Strong. Plainly, one or both of these dates is incorrect, and it is disingenuous to continue to force them on the credence of the world.

Dr. Strong has fixed upon a date for the Deluge which brings his Era of Menes 98 years after the Deluge. While this result is not absurd, I deem it eminently improbable. Poole gives us 682 years between Strong's Era of Menes and the Deluge. This is still better; and Poole's Era of Menes affords further relief. Still, I cannot but feel, in view of the whole body of facts, that all these attempts are constrained and puerile.

Now, running the eye down the table, it appears that Chaldæan and Hebrew types had been introduced into Egypt but 79 years after the Deluge, according to

Usher, or 246 years after the Deluge, according to Strong. It cannot be said that the mixed Egyptian and Semitic features are to be regarded like "comprehensive" or unresolved types in palæontology, because the pure Egyptian type was abundantly delineated at the same date (see figs. 32–35, and especially fig. 36); and this, as the monuments show, was the type of the popular mass, while the mixed type was dynastic, resulting from the royal privilege and opportunity of intermarrying with foreign houses. Similarly, the Hellenic type, nearly or quite pure, was delineated 182 years after the Usherian Deluge, and only 349 years after the Deluge fixed by Strong.

Our deepest interest is in the widely divergent Negro type. This is unmistakably characterized by deep and broad racial distinctions. But this strongly emphasized divergence is known, through inscriptions, to have been in existence *268 years after the Usherian Deluge;* and the actual iconographs depict it under full development 342 years after the Usherian Deluge, and but 509 years after the Deluge as dated by Strong. Let us pause over the significance of these comparative dates. Suppose we ignore the historical mention of Negroes in the inscriptions of the Sixth Dynasty, and pass down to the inconographs of the Eleventh Dynasty. The actual portraitures on the Egyptian monuments exhibit the Negro in all his characteristics, as broadly differentiated from the Noachite as he is to-day upon the banks of the Congo. The *accepted* chronology teaches us that this divergence had been effected in 509 years. This result had been reached 2006 years before Christ, and it is now 1879 years after Christ. It is 3885 years since the Negro was completely a Negro. In 3885 years the Negro has not changed to such an extent that we can detect the

change; and yet we are assured that during the 509 years immediately preceding he had changed by all the amount which distinguishes him from the race of the Apollo Belvedere!

Let it be kept in mind that we are not dealing with fabulous numbers — not even with German chronology, — but with dates which evangelical investigators have fixed according to their own view of the requirements of facts. Is it credible that the immediate posterity of Noah split abruptly into so broad a divergence, and have remained unchanged ever since? Did they breathe a different air, drink different water, subsist on different food? There is no end to possible conjectures. We might even go the length of that easy faith which maintains that fossil bones were created in the rocks; but I shall not follow such brainless credulity with an argument. Resting on scientific grounds, we must pronounce it absolutely incredible that the Negro type diverged completely from the Noachic in 509 years.

Suppose, then, we contemplate the subject from the standpoint of a *local* Deluge. This relieves us of the necessity of tracing all human types to Noah. We must trace to Noah only the families of Noachites. Supposing all human types derived from Adam, a *local* Deluge affords us from 1656 to 2262 years more for racial divergences. On this basis, Usher gives us 1998 years from Adam, for the evolution of the Negro type, and Strong gives us 2168 years. That is, according to Usher, Adam appeared 5883 years ago; the Negro was finally differentiated in 1998 years, and has not changed during the last 3885 years. According to Strong, Adam appeared 6055 years ago; the Negro was fully differentiated in 2168 years, and has not changed during the last 3887 years. In other words,

according to Usher, the Negro continued to diverge during thirty-four per cent. of his existence upon the earth; during the remaining sixty-six per cent. he has not diverged to any appreciable extent. According to Strong, the Negro continued to diverge during thirty-six per cent. of his existence upon the earth; during the remaining sixty-four per cent. he has not diverged to any appreciable extent. Can any scientific reason be assigned for the arrest of this divergence during the last two-thirds of the Negro's earthly existence? I confidently believe that no such reason can be produced.

All analogies, however, negative the assumption of any such interruption of the Negro's progressive differentiation. Palæontology furnishes numerous lines of organic forms which have come down to us from the date when the Negro is known to have been fully differentiated. They have persisted, like the Negro, for 4000 years; they generally exhibit no more organic change during 4000 years than the Negro does. Here is the sacred ibis, of Egypt, and the crocodile, and the scarabæus; here is the well-known ass, and the ox; here are the dog, the cat and the ape. They are pictured to us from the Fourth Dynasty; they remain, like the Negro, sensibly unchanged during forty centuries. But some of these unvarying lines of descent can be traced backward *beyond* forty centuries. Do we find them manifesting rapid changes during the next preceding twenty centuries? The very question is preposterous; it hints at the possibility that Nature has not been uniform — that her methods have sometimes been superseded, and man's intelligent confidence in her fidelity to law is misplaced. No truly scientific mind can entertain the suggestion. No; 6000 years reveal no more change than 4000, so far as our means of measurement go. The lineage of the horse reaches

back far beyond the accepted epoch of Adam, and he is everywhere a horse. By all analogies the Negro type must have persisted from an epoch more remote than Adam.

But we need not deny that the Negro is actually in process of divergence. During the 4000 years of *apparent* stability, the type, we believe, has yielded, to some real extent, to the common tendency to variation, which most biologists hold to be a fundamental law of organization. The horse, traced backward into geological time, brings us soon to an equine modification which proclaims the reality of change, in the equine type. It is not this type alone which teaches us that existing forms have emerged from ancient forms which are only fundamentally similar. We trace backward the types of the pig, the deer, the camel, the rhinoceros, the tapir, the elephant; and soon as we begin to penetrate the abysses of geological time we gaze upon forms too alien to be identical, and yet too like to be anything else, fundamentally, than the living forms from which we receded. It is reasonable to hold, therefore, with the ancient theologians, that the Negro is the living representative of a type which possesses real mutability, and has witnessed real transformations; only, we cannot go with the ancient theologian in maintaining that all his transformations took place in 2000 years, and then ceased; nor in maintaining that the type of Adam was the starting-point of his transformations. All the positive data tend toward the conviction that the Negro has come down to us from preadamic times; that he has always varied at a rate practically uniform, and that consequently his origin must not be sought in Noah, 4000 years back, nor in Adam, 6000 years back,

but in some humble progenitor living on the earth many thousand years before Adam.

Should we adopt the most generally approved German arrangement of the Egyptian Dynasties, all the considerations leading to the above conclusion would be perceptibly strengthened. Lepsius adjusts the Manethonian Dynasties in such a manner as to bring the Era of Menes at 3892 B.C.; and thus, all other Egyptian dates, down to the Twenty-second Dynasty, are correspondingly more removed. The greatest discrepancies, however, between the chronology of Lepsius and that of Poole or Strong, occur in the remoter periods. Leaving the assumed epochs of Adam and the Deluge to stand as before, the intervals from Adam and the Deluge to the dates of divergence of human types delineated on the monuments of Egypt will be, on the basis of the Lepsian arrangement of the Dynasties, somewhat as shown in the following table:

INTERVALS FROM ADAM AND THE DELUGE TO FIRST-KNOWN ADVENTS OF HUMAN TYPES.

Types Designated.	Lepsius' Egyptian Chronology B.C.	After Adam.			After Deluge.		
		Poole, Yrs.	Usher-Strong, Yrs.	Usher, Yrs.	Poole, Yrs.	Strong, Yrs.	Usher, Yrs.
[Era of Menes] - -	3892	888	282	112	—793	—1377	—1544
Egyptian - - - - -	3426	1354	748	578	—327	—911	—1078
Chaldæan, mixed - -	3426	1354	748	578	—327	—911	—1078
Hebrew, mixed - -	3426	1354	748	578	—327	—911	—1078
Hellenic, nearly pure	3000	1700	1174	1004	99	—485	—652
Negro, in inscriptions	2967	1733	1207	1037	132	—452	—619
Negro, in iconographs	2400	2300	1774	1604	699	115	—52
Nubian - - - - -	2400	2300	1774	1604	699	115	—52
Hebrew, pure - - -	1671	3109	2503	2333	1428	844	677
Hindoo - - - - -	1600	3180	2574	2404	1499	915	748
Mongoloid - - - -	1400	3380	2774	2604	1699	1115	948

The Egyptian chronology of Lepsius is by no means the most prolonged which German scholar-

ship has produced. Brugsch carries the Era of Menes 508 years farther back than Lepsius; Unger, 1721 years; Böckh, 1810 years; Mariette, whose determinations are generally adopted by Lenormant, removes the Era of Menes 1112 years beyond the date assigned by Lepsius; yet Lepsius fixes this date 1175 years earlier than Poole, whose chronology is adopted in Smith's Dictionary of the Bible. Strong brings the Era of Menes 1475 years lower than Lepsius. On the whole, if we give equal weight to the great authorities, we shall find Lepsius occupying a medium position.

Now, the above table shows, on the basis of the Egyptian chronology of Lepsius, that the Usherian date of the Deluge is 1544 years *after* the establishment of empire in the valley of the Nile. Even Strong brings the Deluge 1377 years after Menes. According to the Usherian chronology and faith, Egyptian, Chaldæan, Hebrew, Hellenic, Negro and Nubian types of Noachidæ had all been developed in Egypt *before* the postdiluvian life of Noah. Such incompatibilities are too glaring to require exhibition. Either Lepsius or Usher must be shown in the wrong. But even according to Strong, the first four types above named existed before the Deluge, and the Negro and Nubian, but 115 years later than that cataclysmic starting-point of nations. Indeed, we have evidence of the inscriptions that the Negro existed 452 years before the Deluge as fixed in chronology by Strong. So Lepsius and Strong are also pitted against each other. It will require a high authority to set Lepsius aside.

Continuing the comparisons, we perceive that the Lepsian date of Menes is only 112 years later than the Usherian date of Adam. We perceive, also, that the

Egyptian, Chaldæan, Hebrew, Negro and Nubian types of humanity had come into existence within 1037 years of Adam's advent, according to Usher, or 1207 years according to the Usher-Strong determinations. Even the demonstrative iconographs do not postpone the Negro's advent beyond 1604 and 1774 years after Adam, according to Usher and Usher-Strong, respectively. Now, proceeding as before, Usher informs us, through his chronology, that the Negro was fully differentiated in 1037 years (if we follow the inscriptions), or, at most, 1604 years (following the iconographs), and has since lived 4279 to 4846 years without sensible change. Strong assures us that the Negro was differentiated 1207 or, at most, 1774 years after Adam, and has since persisted 4281 to 4748 years without further change. That is, eighteen or, at most, twenty-seven per cent. of the Negro's existence, according to Usher,—even, unlike Usher, supposing him to have started from Adam,—was occupied in completing his full divergence from the type of a white man; and seventy-three to eighty-two per cent. of his whole lifetime has since been passed, under the same conditions, without any perceptible amount of the same results being worked out. If we follow Strong, these percentages become twenty or twenty-nine and seventy-one or eighty.

These calculations are based on views of Egyptian chronology, which seem to me as reasonable, and as well authenticated, as any; and the results materially emphasize the reasoning already employed in reference to the other set of results. There is no escape from these difficulties, except in allowing the Negroes a preadamic career. If we overthrow the chronology of Lepsius, we fall upon the nearly equal inconsistencies which grow out of the use of Strong's Egyptian

chronology. There may be those who will pooh-pooh these difficulties. I can believe there are men who would rather hold, gratuitously, that the course of Nature has been arrested and disordered, than admit that the mediæval understanding of the most ancient document in existence is capable of being improved by five hundred years of later investigation. Such faith is heroic and worthy of reverence; and I shall satisfy myself with paying it this homage rather than aspiring to emulate it.

Three other Black races remain. Is there any probability, in view of what has emerged from a study of the Negroes, that the Hottentots, Australians and Papuans have descended from Adam,—not to suggest their descent from Noah? These races are all about equally divergent from the Noachian and Adamic types. Any conclusion admissible concerning the antiquity of the Negroes will not be questioned when applied to the other Black races. Holding it incredible that the Negroes are descended from Noah, or even from Adam, I shall confidently set them down with Hottentots, Australians and Papuans, as descendants of a preadamite humanity.

CHAPTER XV.

HAMITIC ORIGIN OF NEGROES CONSIDERED.

POPULAR opinion respecting the origin of the Negro race has viewed them as descendants of Ham. This view, originating in a remote age, has retained its position in the ecclesiastical system with all the tenacity which characterizes beliefs hallowed by ecclesiastical sanction. I have sought for the grounds on which the opinion has been made to rest, but I have not succeeded in finding either a scientific or biblical defense which I could ascribe to the holders of the opinion without fear of affronting their intelligence. The opinion seems to be held because it has been held. Because the church has given it to us, many think it must be both sound and sacred, and deem their religion insulted by the suggestion that Ham was not the father of the Negroes. Indignation is in nowise appeased by the demonstration that no such opinion is inculcated in Sacred Scripture. Nevertheless, I shall treat old opinion only with the reverence due to its antiquity. Extreme age earns consideration, even without the adjunct of intelligence. I shall frame my beliefs with exclusive reference to rational grounds, and shall continue to smile at the horror of those who think religion consists in denunciation of persons who believe differently from themselves.

In the absence of any formal defense of the theory of the Hamitic origin of Negroes, I shall cite what I suppose to be the grounds on which the opinion

would be defended, if the attempt were made.* In fact, some incidental apologies for the Hamitic theory which I have met with lead me to think the following the strongest known reasons for entertaining it:

1. *The genealogical lists given in Genesis are not complete.* I reply:

(1) This is bare assumption. It is not intimated in the fifth, tenth and eleventh chapters of Genesis, nor in the first chapter of 1 Chronicles, where the genealogy is rehearsed, nor in the first chapter of Matthew, that any essential fact is omitted. The genealogies are tacitly produced as complete. No exception being taken in the course of 2500 years — the lists being reproduced by pens held to be inspired, I submit that it is more probable the lists are complete than that serious omissions exist which lead the reader into inevitable misapprehensions. When I speak of completeness, I mean the inclusion of all names which could affect the ostensible purposes of the lists — the lineage of Jesus Christ and the estimate of time.

(2) If omissions exist, they must consist of omissions of generations, or of collateral heads of families. The omission of generations would only have the effect of shortening the apparent intervals from Adam to the Flood, and from the Flood to Abraham. Such a lengthening of our conception of the Patriarchal

*Dr. Johnson, in replying to the question, "How is the color of the Negro accounted for?" is said to have replied: "Some think they are children of Ham, whose son was cursed; others, that they are descendants of generations who have lived under burning suns; and others, that they are a distinct race." The reader may recall the fable of Phaëthon, as told by Ovid in the *Metamorphoses*. The son of Apollo, having obtained consent to drive his chariot one day, lost control of the fiery steeds, and they ranged so near the equatorial region as to scorch the skins of the inhabitants.

period would afford relief at many points, but those who maintain the accepted chronology do not feel the need of such relief. They impliedly deny the possibility of such recourse, and are self-precluded from pleading or admitting a defect of this nature in the ethnographic tables. The mention of the probability is disingenuous. If a prolonged chronology would make room for the Negroes, it would none the less overthrow the chronological system which has been built up with such care and nursed with such tenderness. The defenders of the system are at liberty to abandon it for the sake of providing a place for the Negro in the family of Ham; but in this case they must cease coddling and patching the system under any guise; even then they will have little prospect of success in providing such place, for more than a slight lengthening of chronology is required.

Next, the omission of heads of families — as of the unnamed "sons and daughters" of Adam, would afford no help for the popular chronology; because it is *time* which the broad divergence of the Negro from the Hamite requires, not more brothers and cousins. The broad racial separation of the Negro demands, at the low rate of divergence in progress, vastly more *time* than the accepted chronology allows; and the addition of brothers or heads of families would only multiply the number of nations, without providing any greater race-divergence than is now known to exist in the recognized Hamites. But the supposition which would increase the number of nations of Hamites is entirely inadmissible, because the ground is already completely covered. The Bible gives us an origin for every Hamitic nation ever known to exist. The supposition of unmentioned Hamitic origins is both gratuitous and superfluous. The hypothesis of incompleteness in

the ethnological lists, therefore, cannot be employed by the accepted chronology for the interpolation of additional generations, for this would be self-destructive. It cannot be employed to provide a collateral branch of normal Hamites, because all normal Hamites are accounted for. It cannot be employed to provide for a hypothetical branch of Negroid Hamites, because there is no biblical basis for the procedure, and because the restricted chronology does not allow a tithe of the time requisite for their development previously to the Sixth Egyptian Dynasty. The whole hypothesis of incomplete genealogical tables, so far as it is not fatuous and self-destructive, appears like the desperate effort of a man contending with dangers in the dark.

2. *The curse pronounced by Noah.** For the offense of Ham, Canaan his son received his grandfather's curse. "Cursed be Canaan; a servant of servants shall he be unto his brethren." It has been thought that this prophecy has found fulfillment in the habitual slavery to which the Negroes have been subjected by the posterity of Shem and Japheth. But this theory is almost too short-sighted for serious consideration. I have shown (in chapter iii) that the posterity of Canaan are not traceable into the Negro type. I have shown that they did not even settle on the continent of the Negroes. The Canaanites developed into Sidonians, Hethites, Jebusites, Amorites, Girgasites, Hivites, Arkites, Sinites, Arvadites, Zemarites and Hamathites. The places of all these tribes have been found on the east of the Mediterranean. But "afterward," the record informs us, "were the families of

* Gen. ix, 20–27. "Noah," says Lenormant, "had laid a curse on his son Ham, for having been wanting in filial respect, . . . and the curse has been fulfilled in all its completeness." (*Ancient History of the East*, Am. ed., I, pp. 58, 59.)

the Canaanites spread abroad." Does this imply that they spread into Africa, and became transformed into Negroes? By no means; for the very next sentence assures us to what extent they were "spread abroad." "And the border of the Canaanites was from Sidon [on the Mediterranean] as thou comest to Gerar [on the frontier of Philistia] unto Gaza [a Mediterranean city on the confines of Palestine and Egypt]; as thou goest unto Sodom and Gomorrah [in the vale of Siddim, northwest of the Dead Sea] and Admah and Zeboiim [in the valley of the Jordan], even unto Lasha [east of the north part of the Dead Sea]"—"The meaning of which appears to be that the district in the hands of the Canaanites formed a kind of triangle—the apex at Zidon, the southwest extremity at Gaza, the southeastern at Lasha." * The posterity of Canaan, moreover, were white men, and not Negroes.

The definite restrictions of the sacred text, therefore, forbid that we should find the realization of Noah's curse in the black skin of the Negroes, or the slavery to which they have been subjected.

3. *The significance of the word KhâM.* The word is probably derived from KhâMaM, *to be warm*, and signifies *warm* or hot. I have given views (in chapter iii) on the import of this name. It is admitted that it does not express any blackness in the color of the skin. It is a descriptive designation of people dwelling in regions of the earth which, in comparison with the Holy Land, were "warm" or "hot"; just as *Cush* and *Ethiopia* are descriptive appellations derived from the "sun-burnt" complexion of the people who dwelt in some of the warm countries of Kham; and *Troglodytike* was the country of certain Troglodytes,

* George Grove, in Smith's *Dictionary of the Bible*, art. "Sodom," Vol. III, p. 1338, 2d col.

or cave-dwellers. Even if it be insisted that the word Kham signifies *black*, it is, like nearly all proper names of the tenth chapter of Genesis, rather patrial than personal; and applies to a country rather than a man. I should thus feel constrained to agree with Plutarch, that it refers to the color of the alluvial soil of Egypt.

But whatever be the signification of the word, we have traced out all the posterity of Ham, and found them in the "warm" zone south of the Semites; and in Egypt, upon a "black" soil; and have nowhere traced them into countries known to have ever been occupied by Negroes. As to the name Cush, I think it is not pretended to furnish any evidence in support of the Hamitic origin of the Negro.*

4. *Early racial changes were perhaps more rapid than later ones.* This is merely a hypothesis on which an inference might be based. The strength of the inference is measured by the plausibility of the hypothesis. Dr. D. D. Whedon,† in glancing at the question of Preadamites, employs the following language: "Is it not reasonable to suppose, or can Science deny, that the Adamic race was more plastic in its early days than now? There are some things in the Bible that imply this. The antediluvians lived centuries;‡ at any rate those in the direct patriarchal line, and it was gradually that their lives dwindled down to our normal period. Palæontology is full of its displays of plasticity and variation in animal life. There was once an age of mammoths, and iguanodons, and other horrible things with horrible names. If we mistake not, species do seem to start up with strange suddenness, and develop in forms and rapidi-

* See chapter vii.

† Whedon, in *Methodist Quarterly Review*, July 1878, p. 565.

‡ This is a mooted question, as I shall show in chapter xxviii.

ties and magnitudes, at which ignorant Science, in all her pride, stands aghast and dumfounded. Species do start up with mighty vigor in the morning of life, and either dwindle by slow decay, or go out at a leap. Certain it is that species have divergent capacities, some more, some less; indeed, we suspect that the true idea of a species is *a central form with a certain range of possible divergences.** And of every species, did we know the true limits of divergence, we might perhaps be able to draw a generic diagram.† Now, is it at all unreasonable to suppose that the early Adamic race might have possessed a greater and more sudden divergent power than now, and that, as it spread out from its first center into various climates and conditions, it might have early finished out its whole generic programme? If we are told that Science has no experience of any such thing, and therefore 'cannot know it,' we reply that there is no experience by which Science knows the contrary. She knows nothing about it, and must therefore hush into silence, and let history speak. Our maxim is not: *The Bible is false unless Science can affirm its statements.* Our maxim is: *The Bible is true unless Science can incontrovertibly prove its statements false.*‡ If this superiority of plasticity in

*This is equivalent to Morton's celebrated definition: "A primordial organic form"—with obvious, but limited, capabilities of variation.

†Does the author mean a "genetic" diagram? If not, the word "generic" is employed in an extra-scientific sense, and means the assemblage of varieties constituting the *ensemble* of a species; in other words, the group of varieties constituting different *states* of the species. But, under this view, I would prefer to say "a varietal diagram"; and in the next sentence would say "varietal programme," and thus remove ambiguity.

‡This maxim is also mine, but it is an error to assert dogmatically that exegesis has in all cases reached the correct mean-

the early Adamic race was real, we easily understand how the Negro early appears on the monuments, and how the palæolithic man may have been both a son of Noah and an Eskim.

"We suspect that the Africans in Africa are an eminently plastic population. There is on that continent an immense variety of colors and characters, indicating an intense susceptibility to climatic influences. There appears to be a rapid physiological variability,* and a tendency to abnormal specialties hardly belonging to the human species, except as a strange accident. There is a very great tendency to immense changes in language, especially where the alphabet is unknown. Fontaine has shown that two communities of American Indians, once speaking the same language, can, by separation, become unintelligible to each other in two centuries. It can be shown that African languages are still more variable,† so that in two or three thousand years all traces of identity may be lost. In physical characteristics the African tribes shade off into each other; in short, the

ing of Scripture. I may deviate from popular interpretation, and yet accord with Scripture. It is also unfair to assert, constructively, as many carpers at science do — I say it without reference to Dr. Whedon — that he who disagrees with popular interpretation must be ranked with the enemies of the Bible. It is a time-worn fallacy, but always prompted by the instinct of self-love, that "*He who opposes me or my opinion is the enemy of some great common interest which I profess to defend.*" This is the favorite "dodge" of those who have no arguments to present.

*This statement seems to be founded on the existence of great *physiological variations*, ethnic divergences, and ignores what has been ascertained respecting the causes of these phenomena.

†Is not this a little twist on logic? It can be shown, indeed, that African languages are still more *variant*, but as to *variability*, or aptitude to become variant, the result proves nothing. If the result is large, it may have proceeded from *long continuance* of the cause as well as *facility* of effectuation.

variations of the African populations from the Adamic original may be only a question of time, and the question of time is only a question of plasticity. Our impression is that a great extent of time might be a convenience, but is hardly a necessity."

The question which Dr. Whedon's recognized acumen brings into view is entirely reasonable, and demands scientific consideration. There are no conspicuous evidences of the unsoundness of his hypothesis. It may, indeed, be an opinion extensively entertained among scientific men. I cite the following passage from Topinard:* "It is quite clear that the variations of climate and conditions of life are very slight now in comparison with what they necessarily were formerly. The fact is, that man has not always known how to guard against the preponderating influence of external agencies, nor has he always been able to leave the country, under every change of circumstances. No new race, having characters other than those of the mixed races produced from crossing, has been created within our knowledge; and, moreover, everything compels us to believe that there was a greater tendency to change, at a remote period in the past, than there is at present; and this belief has found a support in the law of hereditary influence." The considerations presented by Topinard rest on a different basis from those of Dr. Whedon. Topinard holds to the high antiquity of the human species.† The "remote period in the

* Topinard, *Anthropology*, p. 392. Very recently a similar suggestion has come to me from Rev. S. E. Bishop, of Honolulu. He says, in a letter of 12th April, 1879: "It has seemed to me that the fixed diversities of the races of men might be well accounted for by assigning their origin to the *infancy* of the" human species, when it "would have been *plastic*, and ready to assume extreme variations of type, such as would have been impossible at any later period."

† "Bones, on the other hand, have the inestimable advantage of

past," to which he refers, would be entirely repudiated by Dr. Whedon. Indeed, he directly states that "as far as our limited investigations extend, the law of permanence of types remains intact." Moreover, he is speaking of races who have made advancement from a primitive condition, in which man is at the mercy of circumstances, to a semi-civilized condition, in which protection and comforts have been provided for himself. This cannot apply to the Negroes of Africa. As to the greater flexibility or more rapid change of human organization in those remote periods, that even appears to be a subject of mere suggestion, and is not set down as a conclusion presumably established. The indications of "heredity" are always toward *permanence of type*; and a suggestion of a less rigorous application of the law in any remote time is quite gratuitous.

Turning to the remarks of Dr. Whedon, it must be borne in mind that he writes from the standpoint of a short chronology and a definite circumscription of specific fluctuations. His argument divides into two branches: (1) All species, in the early periods of their existence, possess extraordinary plasticity; (2) The races of Africa still retain an extraordinary susceptibility of change. In support of the former proposition, he cites *first* the extreme longevity of the antediluvians, and notes the gradual abbreviation of their lives. If this were a strictly physiological phenomenon, I should think it implied extraordinary unsusceptibility

presenting to us all that remains of ancient peoples, of which there are no longer any living representatives; some extending back to one and two thousand years, others to *ten and twenty thousand*, when the various types had become less changed." (Topinard, *Anthropology*, p. 206.) This refers only to the antiquity of primeval man in Europe, the oldest, perhaps, of whom any remains have come down to us. Lower races — that is, the human species at large,—he traces to a much higher antiquity, even into Miocene time.

of change. This, in fact, is the definition of extreme longevity. The phenomenon truly implies a different rate of change from the present; but it is a slower, instead of a faster, rate.

Next, he appeals to palæontology, and mentions "mammoths and iguanodons and other horrible things." From this basis of alleged facts he infers that "palæontology is full of its displays of plasticity and variation in animal life," and that "species do seem to start up with strange suddenness, and develop in forms and rapidities and magnitudes at which ignorant Science in all her pride stands aghast and dumfounded"; and that "species do start up with mighty vigor in the morning of life, and either dwindle by slow decay or go out in a leap." Dr. Whedon evidently is here contemplating the well known phenomena of sudden appearance and gradual or abrupt disappearance of specific, and even generic, forms; and his attention fixes itself on the grotesqueness and vegetative bulk of many ancient types. It is easy to understand how such phenomena may impress a mind which antecedently assumes that each species is a fixed type, the product of a special creation, and that all the facts of palæontological history have been brought into view, so that we can base final conclusions on actually known and positive phenomena. But Dr. Whedon, resting on these assumptions, stands on very uncertain ground. It is, on the contrary, almost the unanimous opinion of biologists that a species is not a fixed type, but simply the present aspect of a line of organic development, destined to become something else in the future, as it was something else in the past. According to the prevailing view of a species, its youth, and even its birth, is an epoch impossible to define. It is always new in reference to that which it is, and is to

become. It is always old in reference to what it has been. There is no opportunity to ground an hypothesis of extraordinary luxuriance and plasticity on a youthful condition. An organic form is always equally youthful, and always equally old. Those aspects of the organism which we call species must, of course, have their beginning, their progress and their end; and the transition may present every degree of suddenness or slowness, according to the nature of the conditions to which the organism always seeks a correlation. But still, though new as a putative specific form, it is old as an organism; there is no ground for assuming that the ever progressive organism receives a new installment of vigor or plasticity, at the moment science happens to descry it or describe it as a new specific type. I can discover no reason for positing a greater degree of inherent susceptibility at one epoch than at another.

From Dr. Whedon's point of view, respecting the nature and origin of species, the objection to his hypothesis does not appear so great. And yet, even here, I should feel constrained to dissent. If this view allowed us to compare the lifetime of a species with the lifetime of an individual, there would be some ground for assuming that the impressible infancy and youth of a species must expose it, to an extraordinary extent, to the perturbing and constraining influence of surrounding conditions. But the view places before us, with the utmost suddenness, a complete and matured specific form. A species is not a growth, and has no youth; it is a creation. It is created for the conditions under which it makes its advent. As conditions change, there is never a moment when it is so well suited to its environment as at first. There is never a moment when it does not experience a depress-

ing and destructive warfare with circumstances. There is never a moment when its condition is not becoming more desperate. The time is always impending when the struggle for existence will terminate, and the species, more or less abruptly, will pass out of being. All this means that the vital forces possess a constantly diminishing residuum of strength to conserve the type of the species against the encroachments of external vicissitudes. It means that the sturdiness of the type is greatest when adjusted to the original conditions, and would then experience *least* tendency to variation, instead of greatest.

In respect to Dr. Whedon's other preconception, that the work of palæontology is substantially completed, and we are in a position to argue finally from apparent abruptness of organic advents, it remains to say that he takes a more flattering view of the achievements of "ignorant science in her pride" than the pride of science prompts her to entertain in her own behalf. If proud, she is not uplifted above a humiliating view of the magnitude of the unexplored field, and the incompleteness of her work in every field. She maintains, in opposition to Dr. Whedon, that appearances of abrupt advents are mostly illusory, and depend on the limitations of her knowledge. There was a time — probably when she was less proud — when she felt inclined to believe, with Dr. Whedon, that Nature had, indeed, established the breaks which now she believes to be merely subjective. She now regards them as breaches in the continuity of her knowledge, rather than in the continuity of events. She feels forced to this belief by the progressive disappearance of the breaks, as new discoveries are brought to light. Some old breaks have been completely closed up; some partially closed; and palæon-

tology has reached a stadium where it is safer to argue from the tenor of progressive discovery than to limit conclusion to facts already observed. I mean it is legitimate to base conclusions on facts which we *expect* to discover. I mean that a great inductive *principle* is worth more, in an argument, than the absence of a few desiderated links in the array of facts. Induction has no use if we must wait till every possible fact has been observed before we draw our inference. The inference, in this case, is to the absolute continuity of organization. And the corollary of the inference declares that sudden appearances are not new organizations of organic types, but new advents into the regions observed, or broken ends of the thread of our knowledge. We can no longer recognize these grotesque, and sometimes prodigious, forms, breaking suddenly on the vision of the palæontologist, as new advents into existence; and cannot, therefore, base upon them any conclusion respecting the luxuriance and impressibility of youthful natures. There is, in short, no palæontological proof or intimation that types of organisms possess susceptibilities of variation in any way correlated to the period of their duration.

Dr. Whedon asserts that Science has made no observation opposed to the hypothesis of early plasticity of species. Science has well determined that the physical conditions of life are in continual progress of specialization, and that, accordingly, the law of correlation between organism and environment necessitates a constantly accelerated tendency of organisms to vary. The early periods of specific life, as of organic life at large, are less abundant in the conditions which demand divergence from a central type. As the earliest species, in the infancy of the world, enjoyed a wide range

without encountering causes of variation as pressing as those existing in later periods, so later species, in the infancy of their existence, found the conditions of life more favorable to permanence of type than they became in the culmination and decline of their specific life-histories. Science has observed enough, therefore, to create the presumption that the less specialized environment of the youth of a species concurred with any superior vigor it might have possessed in retarding, instead of accelerating, the tendencies to vary.

The second branch of Dr. Whedon's argument concerns an alleged plasticity of the human type, still manifested on the continent of Africa. This inference is grounded on the great variety of colors, characters and dialects found upon that continent. On these phenomena he predicates "an intense susceptibility to climatic influences" and "a rapid physiological variability, and a tendency to abnormal specialties hardly belonging to the human species, except as a strange accident."

The last sentence prompts me to observe that the extreme divergence from the Adamic type, seen in Africa, is not the only case of extreme divergence which his theory has to account for. There is the vast and remote continent of Australia, presenting even a greater divergence. There is New Guinea, and there is Tasmania, now stripped of its aborigines, in which we find exemplified perhaps the most extreme divergence in the whole field of humanity. There are the distant islands of Melanesia and Polynesia, with their wonderfully deädamized types of men. Are all of these millions of peoples also characterized by an "intense susceptibility to climatic influences," and "a tendency to abnormal specialties hardly belonging to the human species"? I fear we shall have to change the old

aphorism, *Exceptio probat regulam* to *exceptio constituit regulam.*

Now, in reference to the physical discerptions of African tribes, it is apparent that they may be explained in two ways. The gradations between the Negro and the White represent stages in the transformation of the Adamic type into the Negro; or they represent hybrid mixtures of a comparatively fixed Adamic type with a comparatively fixed Negroid type. Now, if we view the gradations as stages in a slow transformation, how do we know that the progress was from the White to the Black, rather than from the Black to the White? I am ready to admit that some of the African varieties of race represent stages in a progressive transformation; but I hold that scientific evidence points toward a progress from the Black toward the White; and that we have no evidence of any racial tendencies toward general organic degeneration, as in a movement from the White to the Black. The evidence bearing on this subdivision of the argument I reserve for separate treatment.*

To a greater extent African varieties have originated in hybrid intermixtures. In almost every case of a type variant from the Negro we are able to discover the foreign element, and to indicate where it exists in its purity. In many, tradition has preserved the memory of the first contact of races, and, in some cases, we know even the date of the occurrence. To illustrate: there is scarcely a doubt that the Nubians are an ancient Egyptian type, adulterated with Negro blood. Farther west, the dwellers in the Desert exhibit the mingled characters of Berbers and Negroes. On the east coast we have the Bishareen, the Hadendoa, and other tribes, who even

*See the next two chapters.

speak a corrupt Arabic; and some of them employ a more ancient Hamitic language, of three genders — the Tobedauic. Between the Blue Nile and the Atbara are other tribes speaking a corrupt Arabic. The celebrated Galla are as black as Negroes, but otherwise they are European. The Somali, near Bab-el-Mandeb, have woolly hair, but claim descent from the Koreishites of Mecca. Ethnologists incline to regard them as a mixture of Semites and Negroes. Since the fifteenth century they have advanced from the southern shores of the Gulf of Aden westward, so as now to spread over the greater part of the East African promontory. In the midst of the Soudan Negroes, the Fulbe possess a fair color and glossy hair, without decidedly Negro features; but they are continually mixing with Negro women, and losing their ethnical distinctions. The Fulbe are known to have been, in the seventh century, "cattle-breeders and hunters in the oases of Tauat, and in the south of Morocco." They are, therefore, probably "a hybrid people, of half Berber half Soudan blood."* The Makololos are intermediate between the Bantu Negroes and the Kaffirs. The Hottentots are a homogeneous race, presenting some reminiscences of remote connection with the ancestors of the Malay race. The tribes of Madagascar are a recognized Malay race, mixed with Negroes and Arabs. Such are examples of the facts touching the ethnography of Africa. It is impossible to go over the descriptions without being led to conclusions somewhat like the following: The primitive people of Africa were Negroid; their territory was encroached upon through the isthmus of Suez by Hamites — if not previously

* Peschel, *Races of Man*, p. 467; Fried. Müller, *Novara-Expedition, Anthropologischer Theil Ethnographie*, p. 97.

by Turanians. The Hamites spread westward as Berbers, and southward as Nubians. Along their borders, hybrid connections with the Negroes gave origin to the Fulbe of the Soudan, and the historical Nubians and Abyssinians of the Nile valley. Further mixture with the Negroes gave rise to the Bishari, the Galla, the Somali and other anomalous tribes which help to give the impression of "rapid physiological variability." Across the straits of Bab-el-Mandeb came Himyaritic Hamites, and effected other intermixtures. At later dates, the Joktanide Semites followed from Arabia, and increased the complexity of the ethnic comminglings. Some of these mixed tribes have pushed into the interior of Africa, but they are everywhere recognizable, as well by their languages as by their Semitic and Hamitic physiognomy. The untainted Negroes, as well as the untainted Hottentots, present such homogeneity as would be expected of an organic type in a state of nature, and exhibit local variations of only trifling extent, except in cases where it is known that hybridization has taken place. This, it seems to me, is the rational explanation of the diversified humanity of Africa, which modern ethnology forces upon us. The "immense variety of colors and characters," instead of showing racial instability, reveals only the racial stability which preserves its distinguishable identity, even in intermixtures of the most complicated kind.

Suppose African populations to possess the easy plasticity which Dr. Whedon has inferred from varietal phenomena, would the Negro type have preserved its identity, as we know it has, for 4000 years? It is not admissible to assume a free plasticity of African

humanity for the purpose of validating another assumption,— that of divergence completed within the space of 2000 years, in the face of the resistless conviction that, for the next 4000 years, that same humanity has remained sensibly as fixed as the topography of the continent. The only outcome is the conclusion that African ethnography is not as fluent as supposed, and that, consequently, no ground remains for the obsolete belief that the Negro had been differentiated from Adam in probably less than two thousand years.*

As to the linguistic phenomena of Africa, it seems to me that Dr. Whedon is sailing directly in the teeth of current philological authority. Nothing is more imperishable than the roots of languages. The most splendid achievements of modern philology are exemplifications of the principle, and the proofs of it. A tribe may forget its ancestors and its country; it may modify its dialect till no longer intelligible to the parental stock; but it cannot destroy the living radicals of its speech. Intonations, vocalizations, suffixes and affixes may vary their quality, but no disguises can hide the central framework of the tongue. It requires but little modification of speech to render the speakers of two branches of a dialect mutually unintelligible; but twenty centuries have not rendered the Greek and the Sanscrit unidentifiable. It is by means of language, as well as of physiognomy, that ethnologists have disclosed the nature of the blendings among African peoples. And it is by means of language that they establish the *per-*

* See the tables in chapter xiv, where, adopting the moderate Egyptian chronology of Lepsius, and the popular biblical chronology of Usher, the Negro is shown to have existed in Egypt *1037 years after Adam.*

sistence, rather than the evanescence, of racial characters.*

It cannot be maintained that no general basis of linguistic affiliations exists in Africa. Great linguistic divergences have, indeed, resulted in Africa from the prolonged existence of its population. Abrupt transitions of dialects exist because, in the transformations of the population, connecting idioms have become extinct with the tribes that spoke them. It is not true, however, that real linguistic discontinuity has been observed. There is said to be a fundamental sameness in all the Negro languages of South Africa, as far as the Soudan. Peschel says: "We find in the whole of South Africa, as far as the equator, with the sole exception of the languages of the Hottentots and Bushmen, closely allied languages, which all place the defining syllable before the principal root, and yet do not exclude the use of suffixes." † Any one who examines the subject will find, also, that a net-work of affinities runs throughout the dialects spoken by the

* On this subject Dr. Whedon will be pleased to note the testimony of so conservative an ethnologist as Brace. "Modern scholarship," he says, "has been gradually approaching the conclusion that among all the tests of community of descent, in a given group of human beings, the best is the evidence of language, connecting with it also the testimony of history." (Brace, *Races of the Old World*, p. 15.) But see more particularly Steinthal, *Characteristik der hauptsächlichsten Typen des Sprachbaues*, Berlin, 1860; Whitney, *Language and the Study of Language*, New York and London, 1867, and *Life and Growth of Language*, New York, 1875; August Schleicher, *Darwin'sche Theorie und die Sprachwissenschaft*, Weimar, 1863. Dialects, it is true, may be violently suppressed or replaced; and this sometimes happens among savages, as among the West Coast Indians of North America. But when from any coercive influence a language has been changed, no change of racial characters is thereby implied.

† Peschel, *Races of Man*, p. 121.

disintegrated Negro populations of the Soudan and its ethnic appendages of territory.*

I believe that Dr. Whedon's suggestions cover the strongest predisposing considerations which can be brought forward in defense of the Hamitic origin of Negroes. At least, I know nothing else to which, by courtesy, the name of "argument" could be given, without exciting the sense of the ludicrous. I have read tirades and personalities and misrepresentations and denunciations; but these, like all similar irrelevances, disclose the desperate character of a cause, and thus furnish real arguments for the other side. I have indicated the means of meeting Dr. Whedon's suggestions; but I desire it borne in mind that the proof of the doctrine of Preadamites does not end here, nor rest here. It is a question of biblical interpretation. The word Adam comes from the Bible, and is employed in a certain sense. All we have to do is to ascertain the sense in which biblical writers employ the term. I have already shown that the use of the term all along *implies* — sometimes the narrative declares — that people existed on the earth who were not descended from Adam. The positive aspect of the argument is completed. The negative aspect has, with this chapter, been taken up. But it remains for the next two chapters to set forth the deepest and most immovable scientific objections to every form of the theory of the Hamitic origin of the Black races.

If it can be shown that Adam, in the purview of the Bible, was not only a white man, but absolutely the first human being, then it will be shown that the Bible is contradicted by a mass of scientific evidence. If it can be shown that Adam, in the purview of the

* See Fried. Müller, *Novara-Expedition, Ethnographie* and *Linguistischer Theil.*

Bible, was absolutely the first human being, then he was *not* a white man; and his epoch is removed from the era of Abraham by a chasm of years, in the presence of which our patriarchal chronology is ridiculous. All who are throwing obstacles in the way of a rational reconciliation of the Bible with recognized science are wearying themselves in an attempt to place an impassable gulf between the Bible and the common intelligence.

CHAPTER XVI.

NEGRO INFERIORITY.

THE theory of the Hamitic origin of Negroes, Hottentots, Australians and Papuans implies that four races out of seven have experienced a degeneracy. This sweeping backward movement of the work of an all-wise and all-beneficent Creator is appalling to contemplate; and it is not surprising that theorists have existed who could deny the inferiority of these races with the same naïveté as any other indisputable fact of observation. Judging from intercourse with friends of the Negro, of the noisy and denunciatory stamp, I should think a large body of "philanthropists" must exist who maintain that it is mere *lack of opportunity* which causes the Negro to seem inferior to the white man. "Consider how, for two hundred years, he has dwelt in bondage; see him worked, late and early, in all weathers; sheltered, like stock, in inclosures too open for comfort or health, and subsisted on 'sides' and potatoes from January to December. The laws have even made it a crime to teach him to read a newspaper, or the Holy Bible. Think of the hardships which he has endured, and judge whether they are not sufficient to have crushed all intelligence and moral principle and manly spirit out of a human being." But, my good friend, I was not proposing to discourse of the Negroes of the United States. I am thinking of Africa, the continental home of the Negro. Yet, since the American Negro is suggested, allow me to inquire how far the Negro has de-

scended below his native condition by being brought into contact with American civilization? Has he been sheltered in a more storm-riddled hut, or clothed in scantier attire, or subsisted on a leaner diet? Or has he associated with more degraded savages, or learned to practice a more superstitious worship, or been deprived of a more cultivated society? The Negro, perhaps, is not, in America, what he would have been if left to his own mastery in the midst of civilized society. The condition of the *northern* Negro will settle this question. But has he not made more progress than his countrymen who were left behind? Can we appeal to the oppression of the American Negro as an apology for the condition of the Negro on the banks of the Senegal and the Congo?

The Israelites were in "the house of bondage" two hundred and sixteen years; and it is not supposable that bondage in the rude infancy of the world, and in heathen Egypt, was less depressing than bondage during the last two centuries in a christian country. But were the Israelites ever reduced to the mental and moral condition of the Negro? The literature, laws and religion of the Mosaic period will supply the answer

That the Negro race is an inferior race I shall show by an appeal to anatomical, physiological, psychical and historical facts. I have already pointed out the salient characteristics of the Negro race.* Let me advert to those which establish his inferiority. Capacity of cranium is universally recognized as a criterion of psychic power.† No fact is better established than the

* In chapter xi.

† "The inferior races have a less capacity than the superior." "The cranial capacity seems to vary according to intellectual endowment." (Topinard, *Anthropology*, p. 229.)

general relation of intellect to weight of brain. Welker has shown that the brains of twenty-six men of high intellectual rank surpassed the average weight by fourteen per cent. Of course quality of brain is an equally important factor; and hence not a few men with brains even below the average have distinguished themselves for scholarship or executive ability. The Noachites at large possess a mean capacity of 1500 cubic centimeters. The capacity among the Mongoloids is 1450* cubic centimeters; among the Negroes, 1360 cubic centimeters, and among the Australians 1276 cubic centimeters. The Noachites surpass the Negro 126 cubic centimeters, or 16½ per cent. Assuming 100 as the average capacity of the Australian skull, that of the Negro is 111.6, and that of the Teuton 124.8.

In respect to the cephalic index, or form of the skull in a horizontal projection, we find that all the lower races are dolichocephalic, and all the higher races are mesocephalic or brachycephalic. The index, for instance, among the Noachites, ranges from 75 to 83°; among the Mongoloids, from 71 to 90; among the Negroes, from 69 to 76; and among the Australians, from 71 to 71.5. The broadest Negro skull does not reach the average of the Germans; nor does the best Australian skull reach the average of the Negro. Mean relative breadth of skull is found to be associated with executive ability.

Among Whites, the relative abundance of "cross-heads" [having permanently unclosed the longitudinal and transverse sutures on the top of the head] is one in seven; among Mongolians, it is one in thirteen; among Negroes, it is one in fifty-two. This peculiarity is supposed by some to favor the prolonged develop-

* This results from rejecting the anomalously low determinations of Eskimo, by Dr. Bessels. See p. 163.

ment of the brain. In any event, it is most frequent in the highest races. This completer development of the osseous tissues in the Negro cranium is probably related to that density and thickness of ossification which enables the Negro, both male and female, to fight by means of butting; and to support hard objects and great weights on the top of the head.

The amount of prognathism is another marked criterion of organic rank. One method of expressing this is by means of "auricular radii," or distances from the opening of the ear to the roots of the upper teeth, and to other parts of the head. Among Europeans, the distance to the base of the upper incisors is 99, but among Negroes, it averages 114. On the contrary, the average distance to the top of the head is, among Europeans, 112; but among Negroes, 110. The distance to the upper edge of the occipital bone is, among Europeans, 104; among Negroes, 104. These measurements prove that the Negro possesses more face, and particularly of jaws, and less brain above. Other measurements furnish a similar result; and show, also, that the development of the posterior brain, in relation to the anterior, is greater in the Negro. Prognathism is otherwise expressed by means of the "facial angle," or general slope of the face from the forehead to the jaws, when compared with a horizontal plane. Among the Noachites, the facial line is nearest perpendicular, giving an angle of 77° to 81°. Among the Negroes, it averages only 67°; among the Hottentots and Bushmen, 60°, and among the Australians, 68.°

Among Negroes the forearm is longer, in proportion to the arm, than is the case with Whites. The same is true of anthropoid apes. The Negro's arm, when suspended by the side, reaches the knee-pan

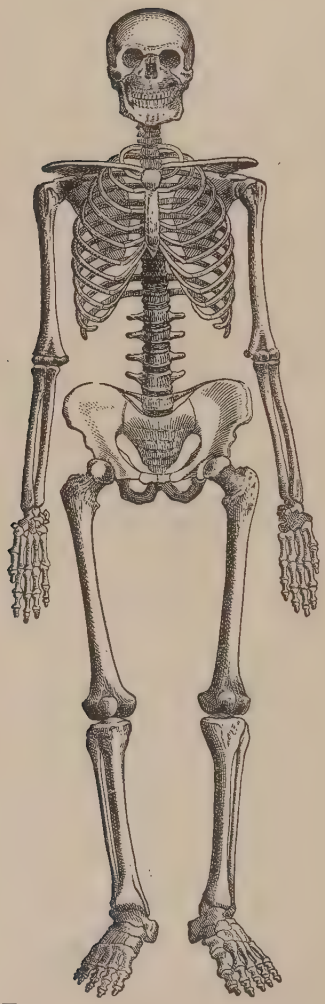


FIG. 41.— Skeleton of an Adamite.

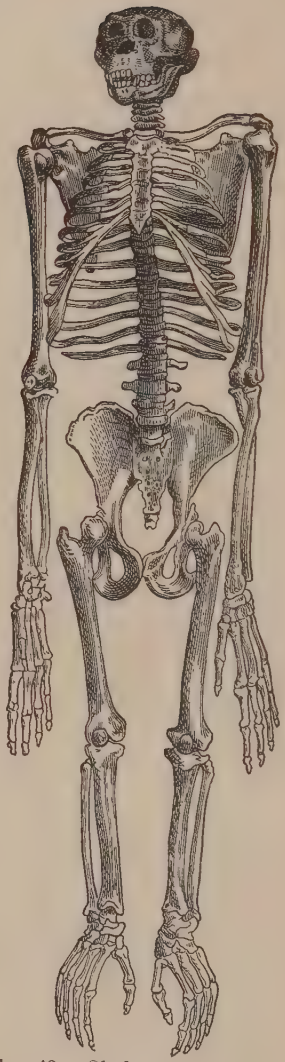


FIG. 42.— Skeleton of a Chimpanzee.

In Fig. 42 the reader will note especially the length of the arms, the narrowness and obliquity of the pelvis, and the angularity or flattening of the tibia.

within a distance which is only $4\frac{3}{8}$ per cent. of the whole length of the body. The white man's arm reaches the knee-pan within a distance which is $7\frac{1}{2}$ per cent. of the whole length of the body. This length of arm is again a quadrumanous characteristic. The Negro pelvis averages but $26\frac{1}{2}$ inches in circumference; that of the White race is 33 inches. In the Negro it is more inclined, which is another quadrumanous character. It is also more narrow and elongated; and this, as Vrolik and Weber have suggested, corre-

FIG. 43.—Profile view of the brain of the Orang-Outang.

sponds to the dolichocephalous head (see Figs. 41 and 42). I present here views of the skeletons of an Adamite and of a Chimpanzee. Their contrasts are apparent at a glance. In every particular in which the skeleton of the Negro departs from that of the Adamite, it is *intermediate* between that and the skeleton of the Chimpanzee.

The average weight of the European brain, males and females, is 1340 grammes; that of the Negro is 1178; of the Hottentot, 974, and of the Australian, 907. The significance of these comparisons appears

when we learn that Broca, the most eminent of French anthropologists, states that when the European brain falls below 978 grammes (mean of males and females), the result is idiocy. In this opinion Thurman coin-

Fig. 44.—Profile view of the brain of the Bushman Venus. (See Fig. 11.)

cides. The color of the Negro brain is darker than that of the White, and its density and texture are inferior. The convolutions are fewer and more simple,

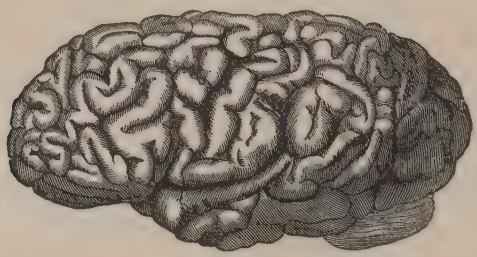


Fig. 45.—Profile view of the brain of Gauss, the mathematician.

and, as Agassiz and others long ago pointed out, approximate those of the Quadrumana (see Figs. 43, 44 and 45). According to M. de Serres, the brain of the Caucasian, during embryonic development, pre-

sents in succession the conformations seen in the Negro, the Malay, the American and the Caucasian. This statement rests on excellent authority, but I am not aware that it has been confirmed. Its significance is apparent, in view of the established principle in physiology, that the embryonic characters in any vertebrate resemble the adult characters of other vertebrates lower in rank. Again, the retreating contour of the chin, as compared with the European, approximates the Negro to the prehistoric jaw of La Naulette, and to the Chimpanzee and lower mammals. Finally, the slenderness of the Negro arms and legs is also quadrumanous. This character is still more striking in the structure of the Australians. (See Fig. 12. This individual, however, is exceptional.)*

In activity and capacity for prolonged and intense effort, the Negro is notably inferior. This point, however, has been sufficiently presented.†

Psychically, I have spoken of the Negro to con siderable extent. In brief, he possesses a strong curiosity to gaze upon new sights, or even familiar ones; but it is the curiosity of the child; he has a feeble power of combining his perceptions and drawing conclusions. In abstract conceptions he is still more helpless; no American Negro has ever produced any original work in mathematics or philosophy; the imaginative and æsthetic powers are similarly dormant; poetry, sculpture, painting, owe almost nothing to Negro genius. "Never yet," says President Jefferson, "could I find that a black has uttered a thought above the level of plain narration; never saw an elementary trait of painting or sculp-

* For a detailed comparison of the characteristics of the Negro and the Mediterranean, see Vogt, *Lectures on Man*, Lect. vii.

† See chapter vi.

ture."* In reference to this, Mr. James Parton says: "We cannot fairly deny that facts give support to the opinion of an inherent mental inferiority. It is ninety years since Jefferson published his 'Notes,' and we cannot yet name one Negro of pure blood who has taken the first, the second, the third or the tenth rank, in business, politics, art, literature, scholarship, science or philosophy. To the present hour, the Negro has contributed nothing to the intellectual resources of man. If he turns 'Negro minstrel,' he still imitates the white creators of that black art; and he has not composed one of the airs that have had popular success as Negro melodies."†

These statements require slight qualification. Phillis Wheatley is said to have been a Negro poetess a hundred years ago, but her poetry, Parton says, was very inferior. She is not mentioned in Tyler's History of American Literature, which, however, ends for the present with 1765. I am not informed respecting the purity of her racial character. Miss Edmondia Lewis is a sculptress of considerable merit, but I am informed that she has the benefit of about fifty per cent. of Caucasian blood. It is also true that some of the more gifted Negroes possess a wonderful power of emotional eloquence, but I suspect that in all these cases some infusion of Caucasian blood exists, as in the case of the highly respected marshal of the District of Columbia, and one or two colored members of congress, and also

* Jefferson, *Notes on Virginia*.

† Parton, in *North American Review*, Nov.–Dec. 1878, p. 488. It is generally understood, in spite of Parton, that some of the melodies made so popular by the "Jubilee" and "Hampton" singers have had a truly Negro origin. Many of their songs, like those wailed from the throats of deck hands on the lower Mississippi steamers, possess a sweet and haunting weirdness which is far from Caucasian.

a few colored pulpit orators. Nevertheless such qualifications do not invalidate the statement that "pure" African blood, even under the influence of Caucasian civilization, has never achieved any valuable results in the realm of art. These statements have been made in reference to the American-born Negro. It is more appropriate to turn our attention to the Negro in his native haunts.

The physical aspect of many native Africans gives them, beyond question, a decidedly beastly look.

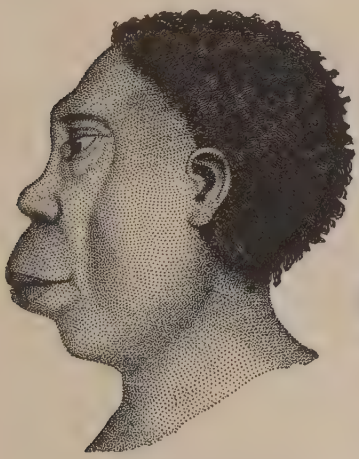


FIG. 46.—Female Hottentot.

FIG. 47.—Female Gorilla.

This has been remarked again and again. Professor Wyman says: "It cannot be denied, however wide the separation, that the Negro and Orang do afford the points where man and the brute, when the totality of their organization is considered, most nearly approach each other." * Here is Cuvier's de-

* Savage and Wyman, "Troglodytes Gorilla," *Boston Journal Natural History*, 1847, p. 27.

scription of the Bojesman woman, known as the "Hottentot Venus" (See Fig. 11, page 72), who died in Paris on the 29th of December, 1815, and whose life-size figure I have examined in the Museum of the Jardin des Plantes: "She had a way of pouting her lips," he says, "exactly like that we have observed in the Orang-Outang. Her movements had something abrupt and fantastical about them, reminding one of those of the ape. Her lips were monstrously large; her ear was like that of many apes, being small, the tragus weak, and the external border almost obliterated behind. These," he says, after having described the bones of the skeleton, "are animal characters." Again, "I have never seen a human head more like an ape than that of this woman." In reference to the fatty protuberances of the haunches, he says: "They offer a striking resemblance to those which exist in the females of the mandrils, the papions, etc., and which assume, at certain epochs of their life, an enlargement truly monstrous." And yet Cuvier was the champion of the opposers of Lamarck, who thought he saw a genetic, as well as a physiognomic and osteologic relation between this woman and the Quadrumana. Here, again, is Topinard's description of the Hottentot physiognomy: "The nose is frightfully broad and flat, the nostrils are thick, very divergent and exposed. Their prognathism is generally enormous, though it varies. The mouth is large, with thick, projecting and turned up lips."

The following is Lichtenstein's description of a Bojesman (Bushman): "One of our present guests who appeared about fifty years of age, who had gray hair and a bristly beard, whose forehead, nose, cheeks and chin were all smeared with black grease, having

only a white circle round the eye, washed clean with the tears occasioned by smoking — this man had the true physiognomy of the small blue ape of Caffraria. What gave the more verity to such a comparison, was the vivacity of his eyes and the flexibility of his eyebrows, which he worked up and down with every change of countenance. Even his nostrils, and the corners of his mouth, nay, his very ears, moved involuntarily, expressing his hasty transitions from eager desire to watchful distrust. There was not, on the contrary, a single feature in his countenance that evinced a consciousness of mental powers, or anything that denoted emotions of the mind of a milder species than what belong to man in his mere animal nature. When a piece of meat was given him, and, half rising, he stretched out a distrustful arm to take it, he snatched it hastily, and stuck it immediately into the fire, peering around with his little keen eyes, as if fearing lest some one should take it away again. All this was done with such looks and gestures that any one must have been ready to swear he had taken the example of them entirely from the ape. He soon took the meat from the embers, wiped it hastily with his right hand upon his left arm, and tore out large half-raw bits with his teeth, which I could see going entire down his meager throat." *

The comparisons made between Africans and Quadrumana must not be understood as intended to imply human descent from Quadrumana. Entirely apart from questions of blood relationship, the morphological and physiognomical resemblances exist; and they are cited for the purpose of showing that, just as far as the African diverges from the style of a white man, he approximates the lower animals.

* Lichtenstein, *Travels in South Africa*, Vol. II, p. 224.

I have thus far confined myself chiefly to points of inferiority inherent in Negro and Hottentot personality. Let us turn to history, and consider the nature of the results which have proceeded from four thousand years of Negro existence and activity. We are apprised, from the Egyptian monuments,* that the Negro was in existence at least as early as the Sixth Dynasty, which, according to Lepsius, was 2967 B.C., and according to Strong 2080 B.C. At that date his race was numerous enough to be the object of hostile expeditions from Egypt; and powerful enough to confer honor upon conquest over him. The Negro race has consequently had national existence in Africa from 4000 to 5000 years. What has it accomplished? It has never yet invented an alphabet† by which the fugitive vocalizations of its lips could be fixed in a permanent record. It has not preserved one sentence of the history of four thousand years. It has written neither science, philosophy nor poetry. It has created neither. It has left us none of the productions of fine art.‡ It has developed only some of the simplest of the useful arts.§ It has built no cities; erected no durable monuments; excavated no canals; transformed no topography, nor removed any natural obstacles to

* See chapter xiii.

† Unless the Veys, closely related to the Mandingoes (see note, p. 257) can be regarded as full-blooded.

‡ The Bushmen are said to have painted the cliffs, from the Cape of Good Hope to beyond the Orange river, with figures of men and animals, in red, bronze, white and black colors; or etched them in light tints on a dark ground. These are said to have been done with great firmness of hand; and copies of them show a fidelity to nature equal to some of the Egyptian delineations.

§ The Fantis on the Gold Coast, under European tuition, have made considerable progress in manufactures, and in learning to read and write (English). One or two of the Congo tribes is said to have acquired the art of ship-building.

the efficient cultivation of the soil. It has organized only the rudest civil societies; and has often marked the administration of authority by oppression, cruelty and bloodshed. It has sold its own blood and flesh into slavery, and made a commerce of human merchandise.* It has organized no religious associations, nor risen, generally, in the practice of religious worship, above the grade of dancing, divination, idolatry and fetichism. It has founded no benevolent asylums, nor formed any charitable associations. Its life has been a continuous scene of personal self-seeking and public administration of the rule of brute force. It has been a struggle — to judge of the past from the present — whose constant aim was material comfort and bodily gratification. There have been organized communities and seats of justice and judgment: but these, in every instance, are the fruits of Caucasian blood. There have been maternal devotion and filial love; but these, however beautiful and admirable, are only nature's indispensable provisions for the material well-being of the race.†

* "Dahomey may perhaps claim the evil fame of being the most savage and cruel organized government on the face of the earth." Brace, *Races of the Old World*, p. 272.

† Of the Mandingoes, however, it is stated by Brace (*Races of the Old World*, p. 267): "They possess well-ordered governments and public schools; their leading men can all read and write (the Arabic); agriculture has been carefully pursued by them; and, in manufactures, they are very skillful in weaving and dyeing cloth, and tanning leather, and working up iron into various instruments. Their merchants are very enterprising and industrious, and exercise great influence through northern Africa. In religion, the Mandingoes are zealous Mohammedans, though a few hold to the old pagan belief." They are described as having "a deep black color, woolly hair, thick lips, broad, flat nose and tall powerful frame, and a similar force of temperament and character." It is not impossible that exception should be made of this great nation. But their relig-

It cannot be said that this almost universal backwardness in all individual and social advances based on intelligence, is attributable to unfavorable circumstances. The conditions of civilization have been favorable. I doubt if it can be shown that any other continental area has been blessed with climate, soil, topography, and other adjuvants, equally favorable for human progress. The climate ranges from the warm temperate of the north to the warm temperate of the south. It has an equal distribution of the sun's annual heat over the parts lying north and south of the central line. No portion of the continent is given over to eternal frosts nor insufferable seasons. The genial sky spares its populations the forethought, labor and time of provision against severe and protracted winters. Over most of the continent, rains are adequate in supply and in distribution through the year. The vast interior, including nearly all south of the Sahara, is an undulating plateau, averaging 4,000 to 5,000 feet above the sea level, with numerous mountain ranges attaining 10,000 to 16,000 feet. The tropical climate is, therefore, fairly attempered to human endurance — certainly

ion and language imply close connection with Semites. They have, themselves, a tradition that they were derived from Egypt, and M. D'Eichthal has presented many analogies between their language and the Coptic. All the west coast tribes, it may be added, have been long under the influence of intercourse with Europeans. Such are the Mandingoes, Fantis and Ashantis, as well as the Kaffirs and Bechuanas of the south. The interior tribes, remaining in a state of isolation from foreign aid, have failed totally to attain even the lowest grade of civilization. The remarkable King Mtesa, of the Uganda, having his capital near the northern shore of Lake Victoria Nyanza, is highly eulogized by Stanley, and deservedly so — (*Through the Dark Continent*, Vol. I, chapters ix and xi); but he and his subjects are of a dark red-brown complexion, and are described in terms which do not apply to Negroes. They seem closely related to the Fulah and Nuba, and are undoubtedly a hybrid stock.

to Negro endurance. Only the Sahara and Nubian portions suffer from intense heat. The climates are also salubrious, save portions of the low borders, especially on the west coast. Salt is plentifully distributed, with local exceptions. Copper exists in large quantities in the center of South Africa, and iron is more widely known. Diamonds are abundant in the district of the Vaal and Orange rivers, north of Cape Colony. Abundance of forest growths cover much of the interior; and farther from the equatorial line fine parks and pasture lands invite the presence of agriculture and herding. Great rivers drain the continent, which, after the passage of the falls, which occur on the borders of the great plateau, furnish navigable channels of communication between all parts of the productive interior. The navigable river and lake system is unsurpassed in extent by that of any country in the world. The mixed races have utilized these advantages to considerable extent. The delta of the Niger is much more extensive than that of the Nile. The Congo — the Mississippi of Africa — is from one to three miles in diameter, and discharges 2,000,000 cubic feet of water per second. The great lakes Victoria and Albert cover each about 30,000 square miles. Many other lakes of fresh water exist, which add to the resources of the interior, in the same manner as the great lakes of North America. The considerable elevation of these lakes, and the discharge of vast volumes of water, must supply to the regions between them and the sea level a surprising amount of water-power.

The native productions of Africa, suited to the wants of man, are quite numerous. The date palm thrives throughout all the desert regions, wherever a moderate supply of water can be had. It furnishes the bread of the desert, and supports not only man, but

camel and horse. Wine is produced from the sap. South of the Soudan, the Baobab or monkey-bread-tree takes the place of the date. Here abounds, also, the oil-palm. Other vegetable resources of the continent are the doom-palm and the butter-tree. There are two native cereals, Negro millet and Kaffir-corn, which supply farinaceous food. There are also the edible bread-roots and earth-nuts, which are adequate to supply the daily food of whole villages. Moreover, for thousands of years the way has been open as wide as the continent, for the introduction of the cereals of Asia. These, indeed, are not entirely unknown to the natives; and maize, the manioc root and sugar cane, have been introduced from America by Europeans, and have begun to spread toward the interior.

The domesticable and useful animals of Africa are not inconsiderable in number. Perhaps the ninety-four species of Quadrumana peculiar to Africa are more noisy and curious than useful. The continent is well stocked with fur-bearing animals, whose skins, if not needed by the natives, would be valuable for export. The quagga and the mountain zebra represent the horse family in the southern parts; while Burchell's zebra is widely scattered over the plains as far as Abyssinia and the west coast; and the aboriginal wild ass is indigenous to northeastern Africa. The domestic horse has not been introduced into inter-tropical Africa. The single-humped camel, or dromedary, is employed over all north Africa; and the Indian buffalo has also been introduced in the north. Other native bovine and ovine species are extensively distributed, while Africa is the peculiar country of the antelope and the giraffe. Lastly, the African elephant ranges abundantly from Cape Colony

throughout central Africa; but, strange to say, it has never been, like the Indian elephant, domesticated. The only gallinaceous bird is the guinea-fowl, but this exists in great abundance; and partridges and quails are distributed over most parts of the continent.*

It is pertinent to inquire if such a continent, so outfitted with resources for food, clothing, transportation, intercommunication and commerce, is a situation suited to cramp the manhood of an indigenous race. Are these the conditions under which the grade of humanity would sink from the level of Adam and Noah to that of a naked black-skin, driveling in filth and wretchedness on the banks of the Congo or the Zambesi; while under the climatic vicissitudes of western Asia and Europe, the same type has risen perpetually through all grades of advancing civilization? The indigenous African has nowhere taken more than the first steps toward civilization. Some

* Mr. Henry M. Stanley has given a catalogue of articles observed by himself in one of the common markets of southern-central Africa. It was at Nyangwé on the upper Lualaba. The following is the list: "Sweet potatoes, yams, maize, sesamum, millet, beans, cucumbers, melons, cassava, ground-nuts, bananas, sugar-cane, pepper (in berries), vegetables for broths, wild fruit, palm butter, oil-palm nuts, pine-apples, honey, eggs, fowls, black pigs, goats, sheep, parrots, palm-wine, pombé (beer), mussels and oysters from the river, fresh fish, dried fish, white bait, snails (dried), salt, white ants, grasshoppers, tobacco (dried leaf), pipes, fishing nets, basket work, cassava-bread, cassava-flour, copper bracelets, iron wire, iron knobs, hoes, spears, bows and arrows, hatchets, rattan-cane staves, stools, crockery, powdered camwood, grass cloths, grass mats, fuel, ivory, slaves." Here is a list which might satisfy the wants even of the luxurious. It is true that many of these articles have originated in the superior knowledge of the Arabs, who hold intercourse with the lake region; but all the vegetable and animal productions are reared in the country, and nearly all are indigenous. (Stanley, *Through the Dark Continent*, Vol. II, chap. iv.

of the tribes have, indeed, learned the art of producing iron; but it is the greater wonder that they have not discovered in it the resources of civilization. It has been said the African elephant is incapable of domestication; but its close affinity with the Asiatic species renders the statement incredible. Indeed, the conviction already exists in south Africa that it is "equally well adapted for labor, and there can be no doubt, would be as easily tamed as his Indian congener. That this is the case, is amply proved by the docile and submissive state into which both male and female elephants" have been brought in zoölogical gardens and menageries.* Nor have any of the equine species been domesticated. Some domesticated animals introduced from Asia are known to the most advanced Africans, but no native species has ever been domesticated.

In America, under conditions certainly no more favorable, a semi-civilization had grown up indigenously. The only cereal native to America is maize, and until the occupation by Europeans no Asiatic cereal was accessible. The principal edible roots of America are the mandioca and the potato, while the feeble llama, and vicuña are the only native animals capable of domestication as beasts of burden. These have been utilized from time immemorial. In contrast with Africa, the civilization of the Nahuatl nations of Mexico, the Quichés of central America, the Mayas of Yucatan, and the Quichuas of Peru, had become, both in respect to intellectual and industrial advances, and judicial, moral and religious conceptions, almost a stage of true enlightenment.

Our wonder at the stationary savagism of virgin

* *Nature*, No. 473, Nov. 21, 1878, p. 54, referring to *The Colonies and India*, of Nov. 2.

Africa is greatly enhanced when we reflect on the relations of civilized peoples to that continent. Ever since the dawn of Accadian civilization in western Asia an open highway of communication has existed between the continents — not to speak of actual communications across the strait of Bab-el-Mandeb. More than this, Asiatic civilization entered Africa, and spread itself over the valley of the Nile and the Mediterranean border, at a period so remote as to be obscured by the twilight of human history. It brought with it the cereals and finally the domesticated animals of Asia. It introduced the arts of industry and the rudiments of the sciences. It established a religious cult which was monotheistic, and remarkably pure and elevated. It opened commercial intercourse, not only with Arabia, Palestine and Babylonia, but with the tribes of the upper Nile and the Libyan region. It engaged in extensive mining operations, not only in the Sinaic peninsula, but in the far southern countries of the *Nahsi* (Negroes). It worked quarries of limestone and granite on an enormous scale. It tilled the soil in the presence of the most forbidding obstacles to be found in habitable Africa. It sent warlike expeditions not only into Asia Minor and Assyro-Babylonia, but into Nubian Ethiopia; and even the armies of a civilized people inevitably sow the germs of civilization among barbarians. The Negroes have been in contact with these people for 4000 years, and save through infusion of blood they have not yet learned the first lesson in civilization. Are these the people whom adverse circumstances have crushed from the grade of Adamic civilizability, and forbidden to rise, even while the hands of Egypt and Libya, and Assyria and Arabia were outstretched to lift them up? The thought is inadmissible. Con-

stitutional, aboriginal, deep-seated incapacity is the only explanation of these amazing phenomena.

We may further contrast the immobility of the Negroes in conflict with civilization, with the facile and eager improvement of the once savage and anthropophagous Maories of New Zealand. The Maories belong to a type sometimes distinguished as Polynesian. It is perhaps a hybrid of Malay and Papuan; they reached their islands about 1400 A.D., and the English took possession in 1769. In 1853 they had made such advancement that Governor Sir George Grey reported that "both races already form one harmonious community, connected by commercial and agricultural pursuits, possessing the same faith, resorting to the same courts of justice, joining in the same public sports, standing mutually and indifferently to each other in the relation of landlord and tenant, and thus, insensibly, forming one people." Mr. Edwin Norris says: "They now (1855) vie with Englishmen in many of their pursuits; they are expert riders, and breeders of horses; they understand perfectly how to make a bargain; they erect buildings, cultivate land, and form good roads far beyond the limits of the English settlements. The more opulent among them become ship-owners, landlords and millers, the latter being especially a favorite occupation; the poorer people make roads, till the ground, tend cattle, build houses and ships, fish for whales, and navigate ships generally. According to good authority, the most regular, clean and orderly of all the coasting vessels plying between Auckland and the Bay of Islands, is owned and manned wholly by natives, and is preferred by the public, as a conveyance for passengers, before all others. They resort readily to the English law courts,

becoming even annoyingly litigious, and their favorite conversation is said to be 'religious and political discussion, and the general news of the day.'"* Yet even the Maories are described as quite inferior, intellectually, to Englishmen.

I need only refer to the familiar history of the Sandwich Islands to further enforce the significance of the comparison. In fact, all Polynesia is fairly represented by these examples.

It would be proper to raise the question whether the Negro is capable of appreciating, desiring and conserving the benefits of civilization. The inertia of the Negro in a state of servitude; his scarcely improved condition, and certain diminution in numbers, since enfranchisement in the United States; his political and social career in Hayti†; his massacre of the agents, and destruction of the agencies of civilization in St. Thomas; his helplessly subordinate station in the northern states of our Union and in Canada; his indifference to the benefits of civilization in Liberia‡; the persistent vitality of Voudouism among American Negroes, in the close environment of a high civilization, and the Negro's facile relapses, as in the Congo

*Edwin Norris, in Prichard's *Natural History of Man*, II, p. 453–4, 4th ed. See also Sir George Grey, *Poems, Traditions and Chants of the Maories*, Wellington, 1853; Arthur S. Thomson, *The Story of New Zealand*, 2 vols., London, 1859.

†"The stagnant condition of the West Indian colonies since the emancipation of the Negro, and the commercial descent of Hayti since it became an independent Negro state, evidence the tendency of that race not merely to suspend progress, but also to relapse into their barbarous habits of apathy and indolence." (M'Causland, *Adam and the Adamite*, pp. 73–4).

‡"The history of that colony [Liberia] does not justify bright expectations of its future." (Dr. O. P. Fitzgerald, in *Nashville Christian Advocate*, Jan. 18, 1879, p. 8).

nation, into a state of abject barbarism, as soon as the props of foreign aid are removed, constitute a set of facts for grave reflection. If the Negro is constitutionally incapable of availing himself of Caucasian civilization, how many lives shall we sacrifice, and how many millions shall we lavish, in attempts to foist it upon him?

I hope I shall not be set down as unfriendly to the Negro. Should any person deem me so, I extend to him all the pity deserved by ignorance and error. I shall not feel hurt. I have no special occasion for unfriendliness toward the Negro. The world would be better if he were an efficient factor in enlightened humanity. The country would be better if he were an elevating and progressive influence instead of a depressing and barbarizing one. I should like to see him capable of coping with his white rival, or at least of profiting by his example and aid. I will do all possible to make him so; but the work must be prosecuted with a clear view of the facts; we defeat the end by proceeding blindfold. I am not responsible for the inferiority which I discover existing; I am only contemplating a range of facts which seems to prove such inferiority. I am responsible if I ignore the facts and their teaching, and act toward the Negro as if he were capable of all the responsibilities of the White race. I am responsible, if I grant him privileges which he can only pervert to his detriment and mine; or impose upon him duties which he is incompetent to perform, or even to understand.

The similar inferiority of other Black races it would not be difficult to prove. The measurements already given show the Australian to possess an organism quite inferior to that of the Negro. In intelligence he is said to be so low as to be unable to count over four

or five.* Of the Aëtas of the Philippines (see Fig. 14), De la Geronnière says that they gave him the impression of being a great family of monkeys; their voices recalled the short cry of these animals, and their movements strengthened the analogy. Büchner says that the toes of these savages, who live partly in grottoes, partly on trees, are "very mobile, and more separated than ours, especially the great toe. They use them in maintaining themselves on branches and cords, as with fingers." According to Büchner, "the language of the savages of Borneo is rather a kind of warbling or croaking than a truly human mode of expression." The Veddahs of Ceylon, says Sir Emerson Tennant, "communicate among themselves almost entirely by means of signs, grimaces, guttural sounds, resembling very little true words or true language." "The Dokos of Abyssinia," according to Krapf, "are human pygmies; they are not more than four feet high; their skin is of an olive brown. Wanderers in the woods, they live like animals, without habitations, without sacred trees, etc. They go naked, nourishing themselves by roots, fruit, mice, serpents, ants, honey; they climb trees like monkeys. Without chief, without law, without arms, without marriage, they have no family, and mate by chance, like animals; they also multiply rapidly. The mother, after a very short lactation, abandons her child to itself. They neither hunt nor cultivate, nor sow, and they never have known the use of fire.† They have thick lips, a flattened nose, little eyes, long hair, hands and feet with great nails, with which they dig the soil."

*This is contradicted, since it is said the Australians use eighteen different terms in enumerating their children. (*Journal of the Anthropological Inst.*, 1872).

† Other authorities declare that no tribe of men is ignorant of the use of fire. (See Peschel, *Races of Man*, p. 144).

Some of the American tribes remain at the lowest point of degradation. This is the case with the Fuegians; and the Botecudos of Brazil have been often cited. Of the latter, Lallemand says, "I am sadly convinced that they are monkeys with two hands."

In the presence of a body of facts like those cited in the present chapter, it seems impossible to doubt that Nature has established a wide range of gradations among races, which cannot be obliterated by any influences having less than secular duration. It seems, beyond all rational question, that the aborigines of Africa are vastly inferior to the Mediterranean race; and that, consequently, if they and the other Black races are the posterity of the biblical Adam, the world has witnessed a general scene of degradation and retrogression which almost reflects on infinite wisdom and beneficence.

CHAPTER XVII.

DO RACES DEGENERATE?

THE degeneration of races is imaginary. But the old theory of Ham's responsibility for the Negro race and its inherent savagism has rendered it necessary to assume that a frightful degeneracy has taken place. The improbability of such degeneracy is a powerful biological argument against the theory, and affects fundamentally and equally all the forms of it set forth in a previous chapter. I shall endeavor to condense my reasons for denying racial and continent-wide deterioration.

I. PROGRESS THE LAW OF ORGANIC LIFE.

1. It is implied in the derivative origin of species. The prevailing opinion among biologists favors the derivative origin of organic species. If this view represents the truth respecting the advent of successive forms upon the theater of organization, it implies that progress has been the law of life. The theory claims that all higher forms are genetically descended from lower. It claims that every existing form is historically traceable backward to some form which represents the humblest condition of organization. Few claim that the data are at hand for assuming any remoter initial point; but it is generally agreed that the broad application of the *principle of continuity*, on which the doctrine of evolution is based, requires that the humblest organization should have proceeded from an inorganic condition of matter.

Now, from a particle of animated jelly to a man, or to an ape, is a vast stride forward; and the doctrine of derivation, when unreservedly interpreted, requires that such a march should have been made. If that doctrine is true, general progress, as the resultant of all organic movements, is the first implication. Undoubtedly there have been pauses and regresses. General progress in the organic world has always been coördinated with progress in the inorganic world; and has proceeded step by step with it. It is a fundamental fact of organization, that it is always suited to the conditions of its existence. This is implied in its existence. But the physical state of the world is always changing; and in this the conditions of organic existence are involved. As material changes are necessarily progressive, tending always toward higher differentiation and specialization, it follows that the coördinated types of organization must continually increase in complication, as a general law. But because, locally and temporarily, physical conditions may remain unchanged, it follows that coördinated organization may locally and temporarily remain unchanged. Indeed, since, in the forward progress of physical processes, there may occur temporary and local relapses to conditions once passed, it follows that coördinated organization may experience local and temporary retrogression. The history of organization exhibits these threefold phenomena. But the progressive tenor of that history is as manifest as the progress implied in the principle of derivation.

2. The law of progress is involved in the fiat theory of specific origins. This theory declares that each species is an original and new beginning. It declares that every new beginning is the result of special creative effort. For my own part, I maintain that the

derivative theory implies the perpetual exertion of extramaterial power which is tantamount to creation.* In respect to the dependence of organic life upon creative power, the derivative theory is certainly not less theistic than the first theory. But assuming that the fiat theory represents the truth touching specific origins, it implies none the less a march of progress through the history of past life.

I have stated already that the condition of the world in respect to organic life has been constantly in course of progress through geologic ages. Of this we have the assurance of all geological observation. The nature of this progress has been ever-increasing specialization of the terrestrial surface. At the dawn of organization the sea covered all. As there was one aspect, so there was one climate and one set of conditions. One species could dwell in every latitude and longitude. No diversity of circumstances demanded diversified powers or diversified adjustments. The first organisms were as undifferentiated in their natures as the conditions to which they were appointed. But when the continental axes began to emerge, the homogeneity of the sea was disturbed. Ocean currents split off from the great tidal swell. There were shallow waters and deeper waters; there were sun-heated land exposures, which generated atmospheric movements; there were gusts of wind, and sudden and local storms; there were fresh waters and salt. Every habitat presented conditions more complicated. New creatures were demanded, with more diversified adaptations and capabilities. They

* See the present writer's views in *Reconciliation of Science and Religion*, pp. 144, 155, 224, etc.; *The Doctrine of Evolution*, pp. 104–123; *Transactions of the Albany Institute*, Feb. 2, 1875; *Methodist Quarterly Review*, April 1877.

were necessarily *higher* creatures. Grade of organization is measured by number of relations.

So, as the continents grew, *pari passu* the conditions of organic existence became more diversified, and organism was subjected to ever new exigencies. The older, more homogeneous and less versatile organisms were discharged from service, and new recruits were perpetually mustered upon duty, possessed of greater alertness and versatility of endowments. Organic progress was necessary. The world, otherwise, could not improve without becoming depopulated. Whether the ages intervening between *Eozoön* and Humanity were filled by the ranks of ever advancing types or not, we know that man is here, and that he could not have subsisted here at first. This means progress. The fiat theory cannot deny progress without stultifying the Creator.

3. Progress is implied in the educability of intelligence, and in its power over nature. I shall not claim intelligence for the lowest orders of animals; but the time is past when all intelligence can be appropriated by man. Wherever intelligence exists, the cognitive faculty is acquiring knowledge and treasuring it in memory. Acquired knowledge may exert only an invisible influence over the acts of creatures below man; but if intelligence exists in them, it does not exercise its normal and distinguishing function unless it helps them to lessons which alleviate all future conditions. Perpetual exercise confers strength and facility. So, whatever is effected by feeble intellect is more largely and more perfectly effected by later strengthened intellect; and so the individual advances. Every grade of intelligence confers some degree of dominion over nature; every new lesson of experience learned qualifies the being better to

brave the adversities of his situation. So each creature, so far as it possesses an educable intelligence, grows in mastery over circumstances; until, as in man, it creates the conditions of its own existence. Intelligence implies progress.

4. The law and the fact of progress are revealed in organic history. I have just argued that progress must have been the fact. I now remind the reader that it *was* the fact. The pages of palæontological science are written over with the chapters of that progress. There have been pauses and retral movements, which, as I have said, the local and temporary pauses and relapses in the march of physical changes must necessitate; but, on the whole, progress has been the zealous purpose which has actuated the history of organization. It is needless to rehearse the convincing facts; they are spread out on the pages of every text-book and elementary treatise which undertakes to unfold the events.

5. The law and the fact of progress are revealed in human history; this is an educational progress. We know nothing in man of that *organic* progress which signalizes the flow of geologic events. Man's relative duration upon the earth, as far as known to us, is so nearly a point that his material parallelism with the course of organic change is inappreciable. Man, as known from the oldest caverns, or most hoary monuments, was organically the man whom we discuss to-day.* But we have witnessed the progress of his mind. In man, the intelligence becomes so large a factor that the acquisitions of the individual

* Some increase in cranial capacity is noticeable when we compare modern skulls with those from the tombs of ancient Greece and Egypt, or even from the Parisian catacombs which contain skulls of the Middle Ages.

attain a conspicuous and potent influence. In man, the faculty of speech opens the opportunity for commerce in ideas and experiences. In man, the knowledge of one becomes the knowledge of the world; it is by man, too, that nature is brought under subjugation, and every element and every condition is made to minister to some need devised by a tireless genius. So man's progress results not more from his inherent aptitude to advance than from his suppression of the physical obstacles to advancement. We look back over the records of man, and learn that this commanding and self-sustaining power over Nature has been acquired by progressive steps. Man himself is the most instructive and most magnificent example of the law and the fact of progress.

II. DETERIORATIONS ARE PARTIAL AND ABNORMAL.

It is time to make an important discrimination which has been generally overlooked. We must distinguish between *structural* degradation and *cultural* degradation. Structural degradation would be the converse of structural improvement. This consists in increased specialization of parts, in reduction of the number of similar parts, in caudal abbreviation, and in increased cephalization, or subserviency of the organs to demands emanating from the head. It is often accompanied by an obsolescence of peripheral parts, a restriction of the animal to narrower geographical and elemental range, and always qualifies to execute with greater adeptness and efficiency the principal and accessory functions which characterize its class modification. Structural advance would accordingly diminish the number of points of detailed resemblance to orders below, and increase the number of points of detailed resemblance to orders above. Structural de-

gradation would be a transformation from the more specialized to the less specialized; from higher affinities to lower affinities. I venture the assertion that the conception of such a transformation does violence to an irrepealable law of organization. I know of no instance of such degradation; I feel justified in affirming, on inductive grounds, it has never taken place.

But the inferiority of the Negro is fundamentally *structural.* I have enumerated the points in his anatomy in which he diverges from the White race, and have indicated that, in all these particulars, he approximates the organisms below. Now I hold it to be the edict of Nature that no type of organization, having once entered the portal of a higher life, shall be permitted to retreat. I read such edict in the principle of continuity which dominates in Nature; I read it in the nature of the actual successions of organic forms, and I read it in the observed facts of the living world.* It follows that what the Negro is structurally, at the present time, is the best he

*The critical reader will expect some qualification, or at least explanation, of the general statement that structural improvement, under the norm of nature, is never reversed. In a certain sense, every specific type which has passed the meridian of its life is in process of decadence. This decadence, however, is not a return toward a condition of inferior differentiation of parts. It arises from a *continuance* of differentiation and specialization and obsolescence of peripheral parts beyond the limit of best adaptation to the environment. It arises from the unhealthy condition thus superinduced, which arrests the full vigor of the nutritive and reproductive functions, and ends in dwarfage, sterility and extinction. Meantime there is no diminution in complexity of structure. Professor A. Hyatt has indeed instanced the return to the straight form of the chambered cephalopod, in the declining ages of the life of this type, as an example of the recurrence of youthful simplicity of structure. This phenomenon is to be fairly considered. It remains

has ever been. It follows that he has not descended from Adam.

Cultural deterioration is totally different, under every aspect. It means a loss of knowledge, and all which knowledge has gained. It may mean a loss of bodily power, and the advantages which such power had won. It may mean a loss of prowess and position and prestige, and a subjugation to ruder and harder conditions. Such losses are liable to fall on individuals, on villages and tribes and whole districts of people. They may result from malaria, deluges, fires, earthquakes, storms, droughts, insects, vegetable pests or wild beasts. They may result from wars, cruel oppression, banishment, fatigue or sorrow. Whatever robs intellect and emotion of their free activity, saps the sources of individual and social culture. Whatever restrains the free action of the physical powers, or diminishes the healthful forces of life, deprives the individual and society of some opportunity for accumulating psychical results. With diminished knowledge, restrained activity, torpid livers, deadly fear, stinted supplies, come torpid minds, blunted sensibilities, religious superstition, shrunken bodies, grim visages — in short, a depraved culture.

to be shown that it is paralleled by events in the declining stages of other types; if it is not, it furnishes no ground for an inductive inference, and we must probably seek an explanation under the principle which I have enunciated. The trilobites retained all their complexity of structure to the epoch of their disappearance. The crinoids were certainly not diminished in complexity during the Mesozoic ages, and those which survive to our times are partly of complicated structure, and partly to be regarded as simple types persistent since Palæozoic time. The declining ganoids are not less complicated than those of the Devonian age. I think it will appear, generally, that senescence and decay of types are not accompanied by any recurrence toward the structural simplicity and comprehensiveness of relations from which they primitively arose.

Ethnological narratives abound in exemplifications of the truth of these statements. The miserable Fuegians, driven to the cheerless and sleety shores of Patagonia; the Dyaks, smitten with apprehension and hived in the inhospitable wilds of Borneo; the natives of some of the west-coast districts of Africa, where they breathe from generation to generation an atmosphere heavy with miasm, are examples, among many, of the depressing and deteriorating influence of adverse conditions of existence. Dr. Whedon* has cited from Brace† an extreme instance of this kind. Brace quotes from Movel,‡ who cites from Dr. Yvan a description of certain "Portuguese" in the peninsula of Malacca: "'In the space of half a century, perhaps, religion, morals, tradition, written transmission of thought, are effaced from their remembrance. The most hideous idleness and absence of all wants are substituted for enjoyments acquired by labor. This degradation presents itself under its characteristic forms: stunted growth, physical ugliness, want of life among children, obtuse intelligence, perverted instincts, progressive successions of sickly transformations, reaching, as a final result, to the extreme limits of imbecility.' This last degenerative form appears strikingly in the descriptions of Dr. Yvan, and we cite his own words. 'There exists,' says Dr. Y., 'in the environs of Malacca, in the direction of Mount Ophir, a little hamlet situated in the midst of the jungles. The inhabitants of this hamlet are in a frightful state of destitution; they do not cultivate; they live outside of all social laws, having neither priest to marry them, nor cadi, nor judge, nor

* Whedon, in *Methodist Quarterly Review*, July 1878, p. 566.

† Brace, *Races of the Old World*, p. 473.

‡ Movel, *Traité des Dégénérescences*, p. 413.

mayor to regulate their differences. Their dwellings are a kind of cabins made of reeds, covered with the leaves of the palm-tree; and their only industry consists in going into the woods to search for the wax produced by wild bees, in washing sand, and in gathering the resin which runs down the trees.

"'The three or four men that we found in the hamlet were lying down aside, smoking coarse maize cigarettes, and chewing the *siri*, like the women. Every one was naked, or wore very little clothing. The complexion of the children was almost white; that of the men and women, soot-color. They had thick lips, large black eyes, straight projecting noses, and rough long hair. They were all small and thin. One would have said that this population passed without transition from infancy to the decline of manhood; youth seemed not to exist for these unhappy people; their eyes were hollow, and the skin withered.

"'Our guides, who were Malays, addressed some of the women, asking them how they named their village, where were their husbands, etc. But after hearing their replies, they declared to us that they could not comprehend perfectly what they had said, on account of a great many words that were not Malayan. The priest who accompanied me descended from his horse, approached them, and discovered that the language they spoke was a simple mixture of Malay and Portuguese.

"'This language itself was the most real expression of the sad mental state of these unhappy people. They knew neither who they were nor whence they came. The names by which they were called represented no family recollection, for they lived rather promiscuously. The idea of time was above their

weak conception, and most of them made themselves remarked by such brutishness that their visitors could obtain no reasonable reply even to the most simple questions.' "

"If half a century can produce such a degradation, what," asks Dr. Whedon, "can a thousand years accomplish?"

The foregoing narrative was reproduced by Dr. Whedon with a view to supporting the theory that Negroes are only degenerated Adamites. I subjoin a few comments.

1. Though these people are designated "Portuguese," it is sufficiently obvious that they represent a very bad mixture with one of the native races; and, like mixed breeds everywhere,* "retain all the vices and none of the virtues" of their parents. Here were a few Portuguese blended with a large mass of barbarous humanity. The "little hamlet" probably presented the original barbarous stock, deteriorated as hybridity generally deteriorates. Manifestly, some unnatural and perverse influence was at work. No normal exercise of the bodily functions ever dulls the intellect to such an amazing extent as Dr. Yvan describes. To have retained no recollection of their ancestors; to have lost all the common sentiments of society and morals, is to fall far below either the Malay or the Portuguese.

2. The deteriorating influence had been long at work. Dr. Yvan states that the Portuguese had "lived in the midst of the Malayan population, with which they have been *for a long time allied.*" It is true that in the extract quoted from Brace, the degradation in question is represented to have taken place "in the space of half a century, perhaps."

* See chapter vi.

But Dr. Yvan, in another portion of his account, states that "their fathers were the companions of Vasco da Gama and Albuquerque." Now, Vasco da Gama died in 1525, and Albuquerque ten years earlier.

3. It would seem that some conclusions were drawn without sufficient data. The people of this hamlet were strangers; and yet the narrator, after a few minutes of amazement, seems qualified to speak of customs which could fall under observation only after a sojourn of weeks.

4. The degradation of these villagers was *cultural*. Mental and bodily distress, according to the account, was consuming all their energies, and shriveling their intelligence. It does not appear, however, that in any of their anatomical characters they had begun to approximate the Negro or the Malay Orang-Outang. You may go into the remote districts of our western territories; or, better, into the secluded regions of some of our southern states, where the soil is poor, the school-house and the post-office remote, the comforts of civilization inaccessible, refined society unknown, and whisky in plentiful supply, and there witness the early stages of a very similar cultural degradation; and that without the deadening influence of barbarous blood, and in spite of the inevitable sight and sound of civilized life. But under no such conditions does the cranium shrink materially in capacity, or assume a dolichocephalous form. Never, except as inherited, does Negroid prognathism develop, or the arm or the heel lengthen, or the pelvis become more oblique.

A little attention will show that all the alleged cases* of degradation are cultural rather than struc-

* Many other cases of degradation are cited by Brace, who seems desirous to find the causes of racial inferiority in circumstances

tural; and that, consequently, they are casual and remediable. They are, therefore, radically unlike the inferiority of the Negro, both in being non-structural and in being non-congenital.

Finally, I desire to remark that not even cultural degradation ever becomes race-wide and continent-wide. It is only a secluded community, or a perverse and desperate family, or a ship-company of mutineers, or, at most, a tribe hemmed in by impassable barriers of some kind, and bound fast under the dominion of some depraving influences. A GREAT RACE, with a vast and fertile and salubrious continent to roam over, has never been smitten on all its borders. Malarial districts may depauperate a province or a tribe. Wars and pestilence, or other afflictions, may reduce other districts to distress and mental poverty. But the great continent is ever an open asylum, where the great bulk of the race will be free to seek the best conditions of existence. Under such conditions, it will always display its normal attributes, and develop into the social state for which it has been destined by the endowments of Nature.

For such reasons as the foregoing, I am induced to believe that racial regress would be in conflict with a law of Nature. It is a conception which has never been realized in fact. It is a theory originated by the

rather than in blood. See also Moor, *Notices of the Indian Army*, p. 49; Roger Curtis, *Account of Labrador*; Proyart, *History of Loango, Congo*, etc.; *Reisen um die Welt*, Leipzig, 1875, Vol. I, p. 554; Robertson, *History of America*, Vol. I, p. 537, etc.; Prescott, *Conquest of Peru*, Vol. II, ch. vi; Wilson, *New History of the Conquest of Mexico*, p. 33; *American Exchange and Review*, Vol. XX, p. 77; Bleek, *Journal of the Anthropological Society*, Vol. I, p. 102; Monteiro, *Angola and the River Congo*, New York, 1876. But on the philosophy of degeneracy see Tylor, *Primitive Culture*, Vol. II, pp. 93, 305, 323, 324, and *Early History of Mankind*, ch. vi.

exigencies of an ethnological dogma once supposed founded on the statements of Scripture, but which does not bear the united scrutiny of the sciences, nor vindicate its validity by an impartial appeal to the biblical authority on which it pretended to rest.

I hope I have now succeeded in showing:

1. The structural and cultural inferiority of the Negroes as a race; and, by inference, the similar inferiority of the other Black races.

2. The very high improbability that these races have undergone a degeneracy from Adam.

3. The unanimity of the Bible and Science in the declaration that the Black races — most unquestionably the Negroes — are not the descendants of Ham, nor of Noah, nor even of Adam.

I might rest the discussion at this point. I have pursued both the positive and the negative aspects of the argument — presenting the direct biblical and scientific proofs of the existence of preadamites, and the untenability of the theories which trace the Black races to Noah or even to Adam. My thesis is proved; but it is natural now to look around and survey the relation in which we are placed toward other truths and other theories. Though the consequences of a demonstration cannot be recognized as evidence either affirmative or negative, every intelligent person is interested in the consequences; and their consideration forms a most appropriate sequel to the demonstration. I invite the reader's kind attention, therefore, to some discussions collateral with the doctrine of Preadamitism.

CHAPTER XVIII.

THEOLOGICAL CONSEQUENCES OF PREADAMITISM.

THE important conclusions attained in the last chapter, if based on good evidence, correctly argued, ought to create no uneasiness. It is no disgrace to the past to be convicted of errors of judgment. It *is* a disgrace to the present to continue to defend the past after conviction of error. If the final conclusion is based in sound *science*, and represents the truth, it is demonstrably a divine truth, and cannot collide with any other divine truth. In the present case, we have the satisfaction of knowing that statements accepted as *verbal* utterances of divine truth very clearly point to the same conclusion. No conceivable motive, therefore, exists for continuing to call the Negroes the sons of Ham; or continuing the attempt to squeeze their history into the space of four thousand post-diluvian years; or persisting in the glaring and hopeless inconsistency of declaring their broad racial divergence to have been achieved in the first third of their race-existence.

If this conclusion disturbs widely accepted beliefs, it is evident, *primâ-facie*, that those beliefs ought to be disturbed. In the light of the conclusion, they are beliefs in falsehood, and the maintenance of them discredits both the individual and the common creed. I may add that Science, as such, feels no concern over such disturbance. Adjustments to dogmatic faith are the work of those who undertake to defend the faith. It is still true that every well adjusted nature must feel

an interest in the relations of scientific conclusion to a system of belief connected with the supreme welfare of our conscious being. I shall venture, consequently, to offer a word of suggestion to such as hesitate over the doctrine of Preadamites, because it seems to interfere with the "plan of salvation."

1. If we discover it true that preadamites existed, it makes no difference in the *facts* concerning the salvation of man. It was always true, however we believed, and however it affected man's redemption. Perhaps man was saved all the time under a system which recognized preadamitism. If the Negro has ever been provided for, his position is not changed by our getting a correct view of his ethnic relation to our own race.

2. That the Negro has all along been a subject of salvation is proved, if we can accept his testimony, by the avowed consciousness of thousands of the race.

3. That he has all along been a subject of salvation is testified by hundreds of religious teachers who have led him to repentance and witnessed the phenomena of a changed life, and passed judgment on the relations of these phenomena to the "plan of salvation." According to the testimony of these witnesses, the Negro is demonstrably embraced under that "plan," whatever we may believe in respect to his precedence of Adam in the genealogical line; so that the field is free for any belief which seems best in accord with the evidences; there is no danger of robbing the Negro of any spiritual privilege. To these facts might be added the *à priori* presumption that the Supreme Being would not effect provision for Adam's salvation, and leave Adam's father and mother completely neglected.

4. Preadamitism does not mean plurality of origins.

It does not even mean plurality of species. The last is a distinct question which may be decided either way. Preadamitism means simply that Adam is descended from a Black race, not the Black races from Adam. This leaves the blood connection between the White and Black races undisturbed. It affirms their consanguinity. It accounts for their brotherhood. It is consistent with their common nature and common destiny. All these relations stand unchanged whatever view we take of the remotest end of the genealogical line.

5. Preadamitism does not exclude the current conception of Adamic creation. It admits that Adam was "created," but substitutes for manual modeling of the plastic clay the worthier conception of origination according to a *genetic* method, and thus embraces the Adamic origin under an intelligible method of production so sublime and significant as to include the whole world of organic beings. Nor must the method be conceived as necessarily, not even as possibly, self-operative. However incapable restricted science may be of passing behind the facts of observation, that higher perception, which is a function of reason, clearly discerns in derivative origins the perpetual presence and potency of a power which is in matter, but does not belong to matter. The derivation of Adam from an older human stock is essentially and literally the creation of Adam.

6. Why, under this view, may not the Negroes have been as much embraced in the plan of salvation as Noah or Abraham? Orthodoxy holds that the atonement was retroactive at least 4004 years; why not a few thousand years farther? If it reached Adam, the remotest ancestor to whom the Jews could trace their lineage, why is it prohibited to presume that it reached the little-divergent ancestry to whom

Adam was probably able to trace *his* lineage? Did the limitations of Hebrew knowledge limit the flow of divine grace?

I think it is recognized by not a few "sound" theologians, that preadamitism does not interfere with current views of the catholic scope of the redemptive "scheme." Dr. Whedon, already quoted so often, says: "All evangelical theologians admit that the justifying power of Christ's death so had a retrospective effect, that sin was forgiven and men saved before the atoning event. So both the law given to Adam, and his transgression of the law and penal death, had also a retrospective effect. Over preadamite men there had been no law; and whatever wrongdoing men committed had not the character of sin, for 'sin is not imputed where there is no law,' and death had not the character of penalty for sin. But in and by Adam law and sin entered into the world, and penal death by sin; and *so death passed upon all men*, Adamites and preadamites alike, for all have not only done wrong, but *sinned*. It is not necessary to maintain that Paul personally knew or held the fact that preadamites existed and were overspread by the power of Adam's sin, any more than he knew that Americans existed, and were so influenced. Paul, by inspiration, stated the principles that covered the whole human race, without claiming to know how extensive the human race is, whether geographically or chronologically. The unity of the race is thus unity of Nature, a unity in the moral identification with Adam, and a unity in the atoning power of the death of Christ." * Dr. Whedon does not profess to

* Whedon, in *Methodist Quarterly Review*, Jan. 1871, pp. 154–5. He returns to the subject, with similar reserve, in *Methodist Quarterly Review*, July 1872. These remarks are made in view of M'Causland's

adopt this reasoning, though he could not present it more cogently if he did. He, however, prefers it to M'Causland's treatment of the same subject. This line of argument, as I shall show (in chapter xxix), is borrowed from Peyrerius by an English writer, from whom Dr. Whedon frames his abstract.

On a subsequent occasion Dr. Whedon writes as follows: "Why not accept, if need be, the preadamic man? If Dawson admits an Adamic center of creation, why not admit, if pressed, other centers of human origin?* The record does not seem to deny other centers in narrating the history of this center. The atonement, as all evangelical theology admits, has a retrospective power. It provides, as St. Paul says, 'remission for the sins that are past'; that is, for those who lived and sinned before Christ died, and who received remission from God, in anticipation of the atonement. It was thus that Abraham was justified by faith through the Christ that had not yet made the expiation. The atonement thus may throw responsibility and propitiation for sin *over all past time*, all terrene sections and all human races. So, too, the sin of Adam may bring all past misdoings of earlier races under the category of sin and condemnation; that is, under the inauguration of a system of retribution which otherwise would not have

polygenistic preadamitism. With still greater propriety may they be urged in view of the monogenistic preadamitism of the present work.

* This means plurality of origins, and consequent "plurality of species." My views are less "heretical" than these. But even the recognition of distinct human origins would not exclude humanities from the relation of mutual brotherhood. All would still be the creations of a common Father, who must be conceived to entertain equal regard for all the moral intelligences which he has called into being.

taken existence. Some theologians have held that the atonement throws its sublime influence over other worlds than ours; why not, then, over earlier human races? Here, as often elsewhere, Science, that seemed to threaten theology, does but open before it broader and sublimer elevations. It contradicts our narrow interpretations, and reads into the text worlds of new meaning. With this provisional view we have not the slightest misgiving as to the effect of the demonstration of the preadamic man upon our theology."*

Dr. M'Causland, an equally orthodox divine, writing on this subject, says: "Redemption extends from the highest heaven to the lowest hades — from Abel and Enoch and Noah to 'the spirits in prison,' who were not of Adam's race. No preadamite, or descendant of a preadamite, is excluded by the Apostle's statement (Romans v). The redemption of Adam's race, who have incurred the penalty of his disobedience, does not prevent the redemption of those who have passed through the valley of the shadow of death unaffected by the transgression of Adam . . . Re-

* Whedon, in *Methodist Quarterly Review*, April 1878, pp. 369–70. This is well said; this is bravely said. Would that Dr. Whedon's words possessed the authority of a pope of Protestantism. While Dr. Whedon stands with trenchant blade and merciless determination upon the citadel of religious faith, he is too shrewd to be fooled by the shriveled old ogre of "Orthodoxy," who comes in the garb of Christianity, begging to be defended from the assaults of common sense. Dr. Whedon is one of the noblest exponents of intelligent theology, and though his mouth is not wholly cleansed of bitterness generated by doses of recent science, it is very apparent that the doses have been taken with intelligent resoluteness, and are acting most beneficially upon his system. To drop the figure, his judgment and susceptibility of conviction possess a greater degree of elasticity than most men's of half his years. May he long live to be an example to younger men, of well-balanced and equal fidelity to religious faith and rational conviction!

demption is no more dependent upon the lineal descent of all mankind from Adam, than it is dependent upon their lineal descent from Abraham, the 'father of the faithful.'" * "The doctrine of a preadamite creation enlarges the sphere of God's mercy, and enlightens our conceptions of the divine scheme of salvation; and the believer should learn to welcome it as a new and interesting page in the history of the dealings of a good and gracious Providence with the creatures he has made." †

Dr. Whedon very correctly suggests, in one of the passages quoted, that if the redemptive plan could reach distant worlds, it could reach a more remote ancestry than Adam. I do not perceive how the force of the logic can be resisted — the less, as preadamic generations supplied the very blood which flows through the veins of the Adamic stock; while the populations of other worlds have with us nothing but an intellectual and moral community. A theology which has borne with the suggestion that redemptive grace reaches throughout a universe cannot, without self-stultification, recoil from the suggestion that it embraces all the human populations of a single world. In this view I feel particularly interested in showing what were the reasonings, in this connection, of a most intelligent and estimable divine, connected with the Methodist Episcopal Church South. Bishop Marvin was a man with whom I had the honor of a personal acquaintance; and it gives me pleasure to acknowledge the esteem which was inspired by his broadly intelligent christian faith. Bishop Marvin

* M'Causland, *Adam and the Adamite*, pp. 298–9. See also *The Builders of Babel*, pp. 321–2.

† *The Builders of Babel*, p. 323.

was the author of a work * the principal aim of which was to magnify the plan of redemption by tracing its provisions to other spheres of existence. In some preliminary sections of a philosophic character he opens the way by dropping some sentiments which might well be commended to the consideration of certain persons who honor themselves in magnifying his worth. "When rational conjecture," he says, "is in harmony with the Bible, it need not be over-timid, nor the imagination itself restrain its rising, if it keep within the empyrean of revelation." † In approaching the discussion of the central thesis, he makes such utterances as the following:

"What if it should appear that the same supreme expression of love, that has our world for its first object, is too full and ample to be confined within this limit, and overflows upon the universe?" ‡

"It can certainly be no matter of surprise if we discover that this purpose [of the Creator in redemption] contemplates a result beyond the destiny of one world. Indeed, we should rather expect to find it a central fact, reaching, in its effect, the utmost limit of being, in space *and duration*." § Would not this be a provision for the poor preadamites?

"From this intimate connection of angels with the history of the atonement, from first to last, I raise a presumption — and claim for it only the value of a presumption — that they are, in some way, personally involved in its results. ‖

"Now, can it be that the Word, in this its last and most precious meaning, is an utterance to man

* E. M. Marvin, *The Work of Christ*, Saint Louis, 1867, 16mo, p. 137.

† *Op. cit.*, p. 10.

‡ *Op. cit.*, p. 70.

§ *Ib.*, p. 74.

‖ *Ib.*, p. 78.

alone, to *one class only* of his intelligent creatures? No, no, no! it is fully articulated to the remotest places of his empire. Its meaning and melody are to charm all ears, and enrapture all hearts in all 'the worlds' he has made, in 'all the ages to come.'" * Would Bishop Marvin, after putting his signature to this passage, declare that our consanguineous pre-adamites are necessarily excluded, while the inhabitants of distant Neptune are cordially invited in?

"If new worlds are hereafter to be made,—if, after the last judgment, new races of intelligent beings are to be created, there must be, we may suppose, some method of bringing them under the power of that influence which proceeds from the cross." † New races, "after the last judgment," would not only be as remote from Christ as preadamites, but they would necessarily represent a distinct origin, on another planet, and in another cycle of cosmical existence. If the atonement could avail for a *distinct species*, removed by some æonic interval, why not for a people connected with "the redeemed" by the brotherhood of an unbroken continuity?

"This revelation of God in Christ is made primarily for man, but ultimately, also, for all worlds." ‡ Now, as preadamites were men, it was made for them.

Parallel with these views of Bishop Marvin may be cited those of Dr. Chalmers, ‖ the tenor of which is shown in the following passage: "Now, though it must be admitted that the Bible does not speak clearly or decisively as to the proper effect of redemption being extended to other worlds, it speaks

* *Ib.*, p. 125. † *Ib.*, p. 129. ‡ *Ib.*, p. 137.

‖ Chalmers, *Astronomical Discourses*, Discourse IV, Amer. ed., p. 134.

most clearly and most decisively about the knowledge of it being disseminated among other orders of created intelligence than our own," etc.

Hugh Miller expresses the opinion that the efficacy of redemption was existent from the beginning of the physical world. "Redemption is thus no afterthought, rendered necessary by the fall, but on the contrary, part of a general scheme, for which provision has been made from the beginning; so that the divine man, through whom the work of restoration has been effected, was, in reality, in reference to the purposes of the Eternal, what He is designated in the remarkable text, '*the Lamb slain from the foundation of the world.*'"*

Sir David Brewster, in considering the relation of the redemptive plan to the populations of other worlds, explicitly recognizes the retroactive and limitless efficacy of the Redeemer's death. "When our Saviour died," he says, "the influence of his death extended backward in the past, to millions who never heard His name, and forward in the future, to millions who will never hear it. . . . Their Heavenly Father, by some process of mercy which we understand not, communicated to them its saving power. Emanating from the middle planet of the system, because, perhaps, it most required it, why may it not have extended to them all — to the planetary races in the past, when 'the day of their redemption had drawn nigh,' and to the planetary races in the future, when 'their fulness of time shall come?'"†

Eighty years ago, Rev. Dr. Edward Nares, in a work of much learning, endeavored to show that the words *Οικουμένη*, *Οὐρανός*, *Κόσμος*, (*Mundus*, *Orbis*, etc.)

* Miller, *Foot-Prints of the Creator*, Amer. ed., 1857, p. 326.

† Brewster, *More Worlds than One*, Eng. ed., 1874, pp. 166–7.

"refer to a universe of worlds, and that the atonement was made for the *creature* generally."* The same opinion is maintained by Bishop Porteus, who thinks it "evident from Scripture, as well as analogy, that we are not the only creatures in the universe interested in the sacrifice of our Redeemer."†

My own opinion respecting the unimportance of all theological questions arising in connection with this or any other scientific discussion was expressed by Dr. Bentley, nearly two hundred years ago. "Neither need we be solicitous," he says, "about the condition of those planetary people, nor raise frivolous disputes how far they may participate in Adam's fall, or in the benefits of Christ's incarnation." ‡

I might proceed here to bring together the suggestions arising from my study of this subject which bear upon the interpretation of the earliest documents of Genesis, in those passages referring to man. This, however, has been done to a sufficient extent in chapter xi. The chief exegetical conceptions admitted by me are the following: In the first chapter of Genesis, the word ÂDâM is so employed that we may understand it to specify mankind in general, or only, as a proper substantive, the name of the first man in Hebrew genealogy. In this most ancient of Hebrew documents I am inclined to think the word is employed only as a common substantive, to signify *man*. But the same word, nevertheless, in the later documents, becomes the proper name of that particu-

* Nares, *Εἷς θεὸς, Εἷς Μεσίτες, or an attempt to show how far the Philosophical notion of a Plurality of Worlds is consistent, or not so, with the language of the Holy Scriptures*, 1801.

† Porteus, *Works*, Vol. III, p. 70.

‡ Bentley, *Boyle Lectures, A Confutation of Atheism*, lect. viii, 1692, p. 298 (ed. 1724).

lar man who stood at the head of the Hebrew line. It is almost universally the case in ethnic usages, that names which have reached a *particular* signification were primitively employed in a *general* sense. After ÂDâM had begun to acquire the force of a personal appellation, the word ISh was often employed to designate Adamite man in general, but whenever a distinction was made between Adamite man and preadamite man, the former was Hâ-ÂDâM, and the preadamite was ISh.

The statement that the "Lord God formed man of the dust of the ground" is shown by chemical analysis to be strictly true; but it does not imply that Adam was moulded by hands, or that he was called into existence from the condition of "dust" in a single day. Adam was a ruddy white man, possessed of the higher range of faculties characterizing the Mediterranean race. He was wholly uncivilized, but developed, in his posterity, a quick aptitude for social improvement. The first man, on the contrary, had been dark-colored and entirely savage.

In no sense of the term was Adam a *primitive* man. He appeared after the race from which he divaricated had lived many thousands of years, and attained the results of long experience and culture. It is quite true, then, that the biblical picture of the antediluvians is not a picture of savage life; but it is no more a picture of the condition of the first generations of humanity ages before Adam, and affords no ground for the claim that the state of the primitive man was not one of abject savagism.

In speaking of the naming of the beasts by Adam, we have the Hebrew method of saying that the names by which they became known were bestowed by a primitive ancestry. The formation of woman from a

rib of Adam is simply an allegory which expresses woman's close relation to man and her dependence upon him, and man's reciprocal attachment to her.

In course of time, Cain, for his sin, was banished from Eden. He went eastward and married a daughter of a preadamite, violating the law of caste, whose breach by the alliance of the "sons of God" with the "daughters of men," is mentioned as a mark of primeval wickedness. Cain, among the preadamites — Mongoloids or Dravidians — built up a city and developed a secular civilization.

The principle which I have eliminated from the use of ÂDâM enables us to understand that the "daughters of men," so-called, were Adamite women; and the "sons of God" were preadamite men. We now learn that the Flood was sent as a punishment of the Adamites; and if they were all destroyed except Noah and his family, the populations of preadamites remained dispersed widely over northern and eastern Asia.

The family of Noah were floated to a mountain called Ararat; but it is extremely doubtful whether the mountain so named in modern geography is the real Ararat. The focus of Noachite dispersions seems to have been located farther east. The Noachites "journeyed from the east" to reach the plains of Shinar; and the general conclusion of modern scholarship makes the Bolor or Belourtagh (the Berezat of the Zend-Avesta and the Merou of the Indians), on the west of Kashgar, the site of the biblical Ararat, and the Plateau of Pamir the seat of the earliest post-diluvian civilization. Journeying westward, they reached the "plain of Shinar," and there laid the foundations of the first historical cities.

The biblical moral unity of mankind, whether it

implies necessarily their genetic unity or not, is fully provided for by the monogenous origin of man under the present scheme of Preadamitism.

After the preceding arguments, analogies, testimonies and exegeses, it must appear probable that the doctrine of Preadamitism is the consistent outcome of both scientific and biblical study. I incline, therefore, to the opinion that rational credence will not suffer any serious strain by concluding that the "orthodox" outcry against the doctrine of Preadamites is merely the shriek of a child's alarm which has not yet embraced the opportunity to take a survey of the situation.

CHAPTER XIX.

GENEALOGY OF THE BLACK RACES.

THE plural origin of mankind is a doctrine now almost entirely superseded. All schools admit the probable descent of all races from a common stock. The ancient opinion, and that commonly held under the popular interpretation of Genesis, conceives all other races as descended from the Adamic stock, which is generally regarded as possessing the ethnological characters of the present Mediterranean race. My own view, which, in this respect, is that probably entertained by derivationists generally, regards the Adamic stock as derived from an older and humbler human type. This view differs from the "orthodox" view only in inverting the terms of the succession. Both views recognize the reality of some genealogical tree for mankind. Those who hold that the White race, the consummate flower of the tree, has served as the root from which all inferior races have ramified, may select their own method of rearing a tree with its roots in the air and its blossoms in the ground. I shall put the tree in its normal position.

From some humblest conceivable type of humanity, as a primitive stock, the diversified ramifications of the human family have ascended. It is impossible to affirm that any representatives of the primitive men still survive. It may be presumed, however, speaking generally, that the lowest human races preserve most of the characteristics of primitive humanity. Still, detached fragments of races, but slightly

advanced, may have been hemmed within a range of conditions so hostile to advancement as to have arrested the normal progress which the main body of their race proceeded to achieve. This is in accordance with the facts of biological history at large. These outlying fragments of races may, therefore, be the best representatives of past conditions. Many instances which *may* belong to this class might be enumerated. Among them are the Dyaks of Borneo, the Congos of Africa, the Fuegians and Botecudos of South America, the Aëtas of the Philippines, and the Aïnòs of the Kurile Islands. These displaced débris of races and tribes, like ethnological fossils, possess, many times, a profound interest, and furnish us with links of connection between well marked and widespread types of mankind. Great care must be exercised, however, to eliminate all cases of real degradation below any normal condition in the past life of the race.

It is obvious that a genealogical tree of mankind must give expression to a natural classification of human types. Conversely, a true classification must indicate the arrangement of the genealogical tree. What are the more and less fundamental grounds of distinction among human types is a question not fully settled by ethnologists. The color of the skin and the character of the pilous system are conspicuous and available criteria. The former has often been made the fundamental basis of classification; it is so in the system of Quatrefages; but modern ethnologists generally hold it in diminished esteem as a taxonomic datum. I am inclined to believe, however, that color possesses more significance than its seemingly capricious distribution in some cases would permit us to suppose. The character of the

hair was made the basis of classification by Bory de St. Vincent, who divided all mankind into two divisions designated *Ulotrichi*, or those with frizzled hair, and *Liotrichi* (or *Lissotrichi*), those with smooth hair. This fundamental division has been accepted and extended by Professor Huxley,* who notes four subdivisions based on color, viz: "Leucous," for people with fair complexions and yellow or red hair; "Leucomelanous," for those with dark hair and pale skins; "Xanthomelanous," for those with black hair and yellow-brown or olive skins, and "Melanous," for those with black hair and dark-brown or blackish skins. These color-characters, combined with the form of the head, give the following fundamental classification:

HUXLEY'S CLASSIFICATION OF RACES.

(Based on Hair, Color and Form of Cranium.)

	LIOTRICHI.			ULOTRICHI.	
	Dolicho-cephalic.	Meso-cephalic.	Brachy-cephalic.	Dolicho-cephalic.	Brachy-cephalic.
Leucous		Xanthochroi			
Leucomelanous		Melanochroi			
Xanthomelanous	Esquimaux	*Amphinesians* *Americans*	Mongolians	*Bushmen*	
Melanous	Australians			Negroes *Negritos*	*Mincopies ?*

The names of stocks known only since the fifteenth century are put in italics.

Professor Haeckel,† also, lays much stress on characters derived from the hair. Among the Ulotrichi, he regards the distinction of woolly-haired (*Eriocomes*) and tuft-haired (*Lophocomes*). Among the Liotrichi,

* Huxley, *Critiques and Addresses*, p. 153.

† Haeckel, *Natürliche Schöpfungsgeschichte*, xxiii Vortrag, especially the table, p. 605, 4th ed.

he also extends the application of the method by distinguishing the straight-haired (*Euthycomes*, as Mongoloids) from those with wavy locks (*Euplocams*, as Dravidians and Mediterraneans).

In the following, which attempts to be an affiliated arrangement, color and hair are made the basis of primary distinctions. The subordinate groupings are merely conjectural, and are based on well-known relationships in general anthropological characters, checked by linguistic affiliations. In this arrangement, the Brown races are assumed to be Adamites. This assumption, as before stated, is very questionable, and is not set down as a conclusion. If we regard them as preadamites, it becomes only necessary to transpose the word "Adamites" in the table, to a position after the Dravidians.

AFFILIATED CLASSIFICATION OF TYPES OF MANKIND.

(Based on Character of the Hair.)

FIRST MEN:
- Ulotrichs,
  - *Eriocomes*,
    - Negroes,
      - Kaffirs,
        - Bantu Negroes,
        - Soudan Negroes.
  - *Lophocomes*,
    - Tasmanians,
      - Hottentots,
        - Fijians,
          - Papuans.

Liotrichs,
Euthycomes,
Preasiatics,
Adamites?
Premongoloids,
Premalays,
Malays,
Malayo-Chinese,
Chinese,
Prejapanese,
Altaians,
Northern Asiatics,
Hyperboreans,
Americans,
European Troglodytes.
Euplocams,
Australians,
Dravidians,
Noachites.

After much consideration of the subject, I am convinced that no classification based on the hair will represent the *genetic* relations among the races and sub-races. An affiliated classification must be based on the sum of the characters, and must be checked by a careful observance of linguistic relationships. I have elaborated an arrangement on this basis; and, having first presented it for convenience of reference, I will proceed to explain the grounds of my conclusions. The notation at the left is for use in connection with the "Chart of the Progressive Dispersion of Mankind." *

* The following table is perhaps more detailed than the present discussion requires; but as the principal aim is to show the probable genetic affiliations of leading types, and the results of my

AFFILIATED CLASSIFICATION OF MANKIND.

(Based on the Aggregate of Characters.)

FIRST MEN:

PREAUSTRALIANS.

1 AUSTRALIANS:

2a I. Bushmen (transitional).

2b II. HOTTENTOTS:

3a Kaffirs (transitional).

3b 1. Bantu Negroes.

(1) Eastern: Zanzibarites, Mozambiques, Betchuans.

(2) Interior.

(3) Western.

Bafans or Fans.

Bundas.

Congoes, northwestern tribes.

3c 2. Soudan Negroes.

(1) Ibo, (2) Nuffi.

(3) Joloffers: (a) Mande, (b) Odshi, (c) Ewhi.

(4) Ghanas, Sonrhay, (5) Hausa, Masa, (6) Bournous, (7) Baghirmi,

(8) Dinka.

Shillook (transitional).

Fundi (including Sennaars, Nubas, Berthas).

own studies are not elsewhere accessible in tabular form, I prefer to let the table stand unabbreviated for convenience of future reference. It is intended to aid the comprehension of the whole discussion on the genetic affinities and primitive dispersion of the races of men.

4a III. Tasmanians (transitional).
4 Fijians (transitional).
4 PAPUANS:
4a 1. Australian Papuans (Melanesians).
(1) New Guineans, (2) Pellew Islanders, (3) New Irelanders, (4) Biranas, (5) Solomon Islanders, (6) New Hebrideans, (7) New Caledonians.
4b 2. Asiatic Papuans (Negritos).
4b¹ b² b³ (1) Aëta, (2) Semangs? (3) Mincopies.
IV. Premongoloids:
MONGOLOIDS.
5a 1. Malays.
(1) Asiatic Malays, (2) Pacific Malays (Polynesians and Micronesians),
(3) Madagascarese or Malagases.
5b 2. Malayo-Chinese (Indo-Chinese).
(1) Thibetans, (2) Lepcha, (3) Sifans, (4) Burmese.
(a) Thai Group, (b) Anamese.
(5) Tribes of Indo-China.
5c 3. Chinese.
5d 4. Prejapanese.
5d¹ d² (1) Coreans, (2) Japanese.
5e 5. Altaians.
5e¹ (1) Tunguses: (a) Mandshu, (b) Orotshong.
5e² (2) Mongols (Tatars or Tartars): (a) East Mongols, (b) Kalmucks, (c) Buriats.
5e³ (3) Turks: (a) Uïghurs, (b) Uzbeks, (c) Osmanlis, (d) Yakuts, (e) Turcomans, (f) Nogaians, Basians, Kumuks, Karakalpaks, Kirghis.

5e⁴ (4) Ural-Altaics.
(a) Ugrians (Ostiaks, Voguls, Magyars).
(b) Bulgarians of the Volga.
(c) Permians (Permians proper, Zirinians, Notiaks).
(d) Finns (Suomi, Karelians, Vesps, Vods, Krevins, Livonians, Ehsts, Lapps, Bashkirs, Meshtsheriaks, Teptiars).

5e⁵ (5) Samoyeds.
(a) Soiots, (b) Karagasses, (c) Kamassintzi, (d) Koibals, (e) Yuraks, (f) Tawgi.

5f 6. Northern Asiatics of doubtful position.
(1) Ostiaks of the Yenesei, (2) Yukagiri, (3) Aïnos ? (a) Southern Saghaliens, (b) Kurilians, (c) Giliaks.

5g 7. Hyperboreans.
(1) Itelmes or Kamtskatdales, (2) Koriaks, (3) Chukchi, (4) Namollo, (5) Eskimo, (6) Aleuts, (7) Thlinkets and Vancouver Tribes.

5h 8. Americans.

5h¹ (1) Hunting Tribes of North America. Kenai (transitional).
(a) Athabaskans, (b) Algonkins, (c) Iroquois, (d) Dacotas, (e) Pawnees and Ricarees, (f) Choctaws, Chickasaws, etc., (g) Cherokees, (h) Texas Tribes.

5h² (2) Hunting Tribes of South America.
(a) Tupi, (b) Lenguas or Guaycuru, (c) Parexis or Poragi, (d) Gês or Crans, (e) Crens or Gueras, (f)

Gucks or Cocos, (g) Mandrucu, (h) Miranhas, (i) Tecunas, (j) Uapes, (k) Arowaks, (l) Caribs.

5h³ (3) Civilized Nations and their Kinsmen. Shoshones (transitional).

(a) Toltecatlacs: Nahoas, Toltecs.

(b) Nahuatlacs: Aztecs, Tezcucans, Tlacopans, Tepanecs, Tlascalans, Chontals, etc. Californians, Moqui, Utes, Pah-Utes, Comanches.

(c) Other Mexicans: Chichimecs, Michuacans, Huastecas, Otomies, Mixtecs, Zapotecs, Mazatecs, etc.

(d) Palencan Group: Quiché, Maya.

(e) Isthmian Group.

(f) Peruvian Family: Chibcha or Muysca, Quichua, Aymara or Colla, Cara.

(g) Yuncas, Araucanians, Pampa Tribes, Patagonians.

5i 9. European Troglodytes.

5i¹ (1) Stone Folk.

5i² (2) Iberians: (a) Basques, (b) Finns, Lapps, etc.?

6 V. DRAVIDIANS.

6a 1. Munda (Jungle Tribes).
(1) Kohl, (2) Santal, (3) Bhills.

6b 2. Cingalese.

6c 3. Dekkanese: (1) South Dravidians, (2) Brahui.

7 4. ADAMITES (Mediterraneans).

7 Noachites.

7a (1) Hamites.
7a¹ (a) Accadians.
Pelasgians, Etruscans.
7a² (b) Himyarites.
Arabian Himyarites, Galla, Somali, Fulah? Nuba?
7a³ (c) Mizraimites.
Egyptians, Berbers, Atlantideans, Nubians, Fulbe.
7a⁴ (d) Canaanites (the primitive tribes)
7b (2) Semites.
7b¹ (a) Assyro-Babylonians.
7b² (b) Phœnicians and Carthaginians.
7b³ (c) Hebrews.
7b⁴ (d) Joktanide Arabs.
7b⁵ (e) Ishmaëlite Arabs.
7c (3) Japhetites (Indo-Europeans or Aryans).
7c¹ (a) Asiatic Aryans (Aryans proper).
Medo-Persians or Iranians.
Hindoos or Brahmans.
7c² (b) European Aryans (Yavanas or Ionians).
7c²′ Ionians proper: Achæans, Ombro-Latins.
7c²′′ Kimmerians.
Scythians.
Thracians, Kelts, Letto-Slavs.
Germans.
Modern Germans.
Anglo-Saxons.

NOTE.—In the foregoing table I have given the Native Americans the arrangement usually assigned, and not that proposed in the twentieth and twenty-fourth chapters.

I fix upon the Australians as the lowest type of humanity. I have before shown (chapter xvi) that their cranial measurements and proportions are inferior to those of any other race; I have argued specifically the inferiority of the Negroes and Hottentots to the White race, but in every particular in which they fall below the White race, the Australians fall still lower than the Black Africans. The jet-black color of the Negroes is farther removed from the White race than the leather-brown of the Australians, and so is the kinky character of the hair; but the inferior structural and psychic characters of the Australians far outweigh the significance of the color and the hair of the Negroes.* In accordance with this conclusion, we find the mammalian fauna surrounding the Australians, the lowest inhabiting any continental area; and the well-known principle of harmony of continental faunas would imply that the lowest and oldest type of men should be associated with the lowest and oldest type of mammals in general.

On opposite sides of the curly-haired Australians are the two tufted-haired races — the Papuans and the

* "The Australians have one of the smallest cranial capacities known among mankind; they are among the most dolichocephalic, the most prognathous, and the most platyrrhinian." (Topinard, *Anthropology*, p. 503.) Dr. Friedrich Müller writes: "At the lowest stage we see the Australian, a being who roves quite like a beast; a being destitute of all except purely animal wants. The Australian subsists, like the beast, principally upon food discovered by chance, and his dwelling is miserable. His intelligence is dull; only the gratification of animal instincts, as hunger, thirst, sexual desire, suffices to arouse it to any extent." (F. Müller, *Novara-Expedition, Anthropologischer Theil, III Abth., Einleitung*, S. xxvii.) These statements, however, are too sweeping, as Dr. Müller himself subsequently discusses "religious phenomena," and says it is certain that "the Faith of the Australians is not very different from the so-called Shamanism of the High-Asiatics." (*Ib.*, p. 9.)

Hottentots. The Papuans are spread out over New Guinea and some smaller islands northeast of Australia. The Hottentots and related Bushmen occupy South Africa. Yet the totality of Hottentot characters does not present a close resemblance to the Papuans. The Hottentots possess a dark, leathery color, quite resembling that of the Australians; the Papuans are very dark skinned, almost black. The Hottentots are nearly destitute of beard; the Papuans, like the Australians, are heavy-bearded, and their bodies are generally hairy. The Bushmen, whom many ethnologists class with the Hottentots, are very small of stature, and the women are characterized by steatopygy; the Papuans are of large stature, and steatopygy is almost or completely unknown. A classification, therefore, which throws the Hottentots and Papuans into one group, simply because both races have tufted hair, is one which ignores the general disparity of their physical characters. I regard it as reasonable to assume that these two races have been developed independently from the central Australians.

The resemblances of Hottentots and Papuans are treated by Peschel as follows: "We must call attention to a remarkable coincidence of specific resemblance between the Koi-Koin [Hottentots] and the Papuans of Fiji. Not only are the tufted matting of the hair and the narrow shape of the skull common to both, but, in women of the Papuan race, there is also a tendency to steatopygy.* We must attribute less importance to the point that in both races, men and women eat apart, from the fact that this practice is not uncommon elsewhere. It is more remarkable

* At least among the people dwelling on the shores of the Utenata river in New Guinea. (Salomon Miller, *Natuurliche Geschiedenis der nederlandcshe Bezittungen.*)

that the Fijian women, when mourning for the dead, cut off joints of their fingers, and that the same mutilation is practiced by the Koi-Koin as a rule, especially among women, more rarely among men. But the direct coincidence of the legends concerning the mortality of man is very strange. Two gods, the Fijians relate, disputed whether eternal life should be conferred upon mankind. Ra-Vula, the moon, wished to give us a death like his own; that is to say, we were to disappear and then return in a renewed state. Ra-Kalevo, the rat, however, refused the proposal. Men were to die as rats die; and Ra-Kalevo carried the day. According to Anderson, the Koi-Koin have transformed the legend in the following way: The moon sent the hare on an embassy to man to say, 'As I die and am born again, so shall ye die and come to life again.' But the hare gave the message wrong, for he used the words 'As I die and am not born again.' When he confessed his mistake to his employer, the moon hurled a stick at the hare and slit his lips. The faithless messenger took flight, and still ranges timidly over the face of the earth."

"The temptation is great," continues Peschel, "to explain the coincidence of decisive physical characters, strange customs, and even a peculiar legend, by supposing either that the Koi-Koin and the Papuan Fijians were derived from a common ancestry in primordial times, or at least that they lived so near together as to exchange customs and legends. But neither hypothesis is tenable. On closer examination, the Koi-Koin are sufficiently distinguished by the color of the skin, the absence of hair on the body, and by the lowness of the skull. Among these people, the amputation of the finger-joints is effected during youth, and seems to be superstitiously regarded as a sort of charm. It

occurs, moreover, among the Polynesians and in the Nicobars. Thus there remains only the similar connection of the moon with the hope of immortality. But this merely corroborates the old maxim that, among different varieties, in different regions, and at different times, the same objects have given rise to the same idea." *

The Negroes I regard as an offshoot from the Hottentot branch. The populous nationality of the Kaffirs stands intermediate in ethnological characters, as it does in geographical position, between the Bushmen and the Bantu Negroes. The Makuani reveal the trail receding from the Bushmen, by a steatopygous deformation. From the Kaffirs, the Negroes of other parts of Africa may easily have descended.† From the Kaffir country, as far north as the equator, similarity of dialects points to a common language in the remote past. Among the Soudan Negroes greater diversity is noticed, both in dialects and in tribal characters. These facts are in accord with the theory which places the Soudan Negroes farther from the point of divergence of the Negroid types.

The typical Papuans are restricted to those islands which are geologically connected with the Australian continental mass. They are hence styled Australian Papuans. The Asiatic Papuans inhabit islands geographically connected with the Asiatic continental mass. They present, accordingly, approximations to the ethnic type of the neighboring continent. These, in many cases, are obviously the result of hybridity; other cases are more doubtful, as we shall see.

* Peschel, *Races of Man*, pp. 461–2.

† The reader will understand that I except those semi-negroid nations, like the Fulbe, the Téda and the Galla, which are so distinctly hybrid races.

CHAPTER XX.

GENEALOGY OF THE BROWN RACES.

ON the basis of a common origin of all the races, we must next discover some traces of genetic connection between the Black races and the Brown. It is interesting to note here the fact of an apparent ethnic transition between the Mongoloids and the Papuans. The typical Mongoloids and typical Papuans are too distinct to be confounded; but I have heretofore called attention to the Aïnos, and some linguistically allied tribes, as representatives of primitive predecessors, perhaps ancestors, of the Japanese and Coreans. Similarly, we find on some of the more westerly islands of the Melanesian group, on the Molucca group, and other islands of that neighborhood, "*the remains of an aboriginal population*, once belonging to the Papuan race, but now mixed with Malay blood."* The Aëta of the Philippines have preserved their ancient racial characteristics in full purity — particularly on the northeastern shore of Luzon (see Fig. 14).† "In common with the Australian (typical) Papuans, they have woolly, crimped crowns of lusterless hair, and flat noses, widening below. Their skin is not black, but of a *dark copper color*. The lips are a little intumescent, and the jaws slightly prognathous." But the few skulls examined

* Peschel, *Races of Man*, p. 339.

† The Mincopies of the Andaman islands are probably another remnant of this primitive Papuan stock.

are too brachycephalic for complete identification with Australian Papuans; and the Semangs of the peninsula of Malacca, which possess similar hirsute characteristics, and otherwise resemble Papuans, have been, in consequence of linguistic affinities, classed by Latham unhesitatingly in the Malay group.* These intermediate types constitute a physical transition between the two races — Mongoloid and Papuan. The steps in the transition are as follows: Australians, Papuans, Asiatic Papuans in general { Aëtas to Aïnos [?] / Mincopies to Semangs } and Japanese and Malays } Mongoloids. The chorographic relations of these ethnic types present no insuperable difficulties, since the Asiatic Papuans could easily have spread across by Formosa and the Loochoo Islands, to Japan and the Kuriles. While such a descent is thus rendered possible, we must hesitate to rest upon it as conclusive.

In reference to the other Brown race of primitive Asia, the Dravida, it is a fact whose significance points in the same direction, that ethnologists have remarked their affinities with the Australians — the mother race of the Papuans. Professor Huxley says the Australians are *identical with the ancient inhabitants of the Deccan.* Broca and Topinard class the latter with Australians. The color of the Aus-

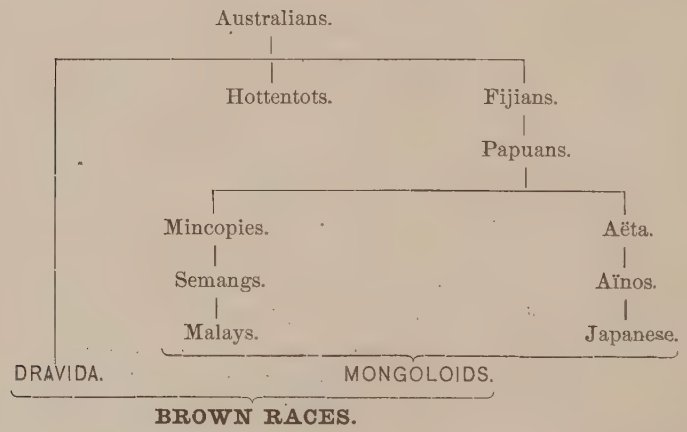
* Latham, *Opuscula*, London, 1860. The Semangs, the Mincopies, and the Aëta or Aïgta, constitute the Negritos as defined by Quatrefages. ("Etude sur les Mincopies et la race Négrito en général," in *Revue d'Anthropologie*, Vol. I, 1872.) For latest conclusions on the Andamaners (Mincopies) see report of Professor Flower's lectures, in *Nature*, July 3 and 10, 1879. He insists that the Negritos (as above defined) are a distinct and properly constituted *race*. He thinks the Andamaners may represent the primitive stock from which the Negroes sprang. This conclusion is consistent with the view of the facts which I have presented. Professor Flower questions, however, the alleged existence of Australian elements in Hindustan.

tralians is a dark, chocolate black, with sometimes a tinge of red in it. They are slight (see Fig. 12) and well made, and the pilous system is well developed over the whole body. In these particulars they agree well with Dravidian tribes. Both races make use of the boomerang — a circumstance which may be regarded as almost demonstrating some sort of connection, — and both races recognize the institution of caste, though, among the Australians, the traces of it are obscure. Finally, considerable affinity exists between Australian and Dravidian languages.* In spite, then, of decided Australian relationships with the Papuan and Hottentot types, sufficient affinity with the Dravidian exists to justify us in agitating the question of derivative relations between them. In this view, we should contemplate the Australian and Papuan as two closely related Black races, from which have descended the two related Brown races — the Dravidian and the Mongoloid. In such case, of course, the common premongoloid and predravidian stock was never spread over the continent of Asia. The point of retral convergence of the line of descent was in some other quarter of the world, and reached back beyond the epoch of divergence of the Australians and Papuans.

Other ethnologists have traced resemblances directly between the Hottentots and the Mongoloids. "The only people to whom the Hottentot has been thought to bear a resemblance are the Chinese or Malays, or their original stock, the Mongols. Like these people, they have the broad forehead, the high cheek-bones, the oblique eye, the thin beard and the dull yellow tint of complexion resembling the color

* On Dravidian and Australian affinities see Topinard, *Anthropology*, pp. 504–5.

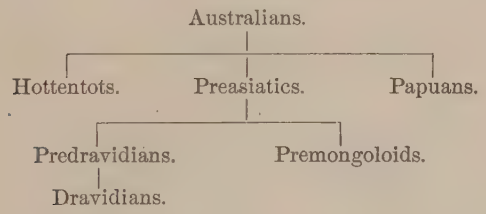
of a dried tobacco leaf."* Ethnology seems, therefore, to recognize some affinity of both Mongoloids and Dravida with the Hottentots. The affinity of the Dravida is traced through the Australians, who are recognized as bearing resemblances both to Dravida and Hottentots. The affinity of the Mongoloids is traced sometimes directly and sometimes through the Papuans. Between the latter and the Hottentots stand the Fijians, and between the Papuans and the Mongoloids we have one line of connection passing through the Aëta and perhaps the Aïnos, and another through the Mincopies and Semangs. These relationships may be represented by the following diagram:



On the other hand, the Dravida are known to possess considerable affinity with the Mongoloids. Their language, though much more developed than

* Keith Johnston, in *Encyclopædia Britannica*, art. "Africa," Vol. I, p. 264. It is doubtful, however, whether the Mongols are an older type than the Chinese. The Chinese language is the most primitive of all Mongoloid dialects.

the Mongoloid dialects, possesses characters which have induced some ethnologists to class it in a "Turanian" family.* More than all, the Cingalese Dravida have attained an intellectual position so far above the Australians that, in spite of many physical resemblances, we must feel constrained to trace them to some stock already quite diverged from the Australian. It is likely that a preasiatic stock once existed which, on one hand, was a divarication from the Australian, and on the other, divaricated into primitive Dravidians and premongoloids. This conception is represented by the following diagram:



Of all Mongoloids, the Malays seem to approach nearest to the Black races; and this approximation tends toward the Australians, except among those Micronesians where intermixture with Papuans is evident. In both the Asiatic and Polynesian branches of this type, the color of the skin is very dark, and sometimes almost black. A moderate degree of

* Mr. Webb has pointed out with studious care (*Journal American Oriental Society*) the nature of the affinities between the Dravidian and Turanian languages. For a synopsis of this see Brace, *Races of the Old World*, pp. 138–9. Professor J. D. Whitney, however, thinks the conclusions should be reached after the acquisition of a larger basis of observations. See also a memoir by M. Alfred Maury, on the *Distribution and Classification of Tongues*, in Nott and Gliddon, *Indigenous Races of the Earth*, pp. 52–4.

prognathism exists, and the zygomatic arches are prominent. The Polynesian Malays have less breadth of head than most Mongoloids, and the Malay languages are very distinct. All Malays, however, approach the Mongoloid type so distinctly that few

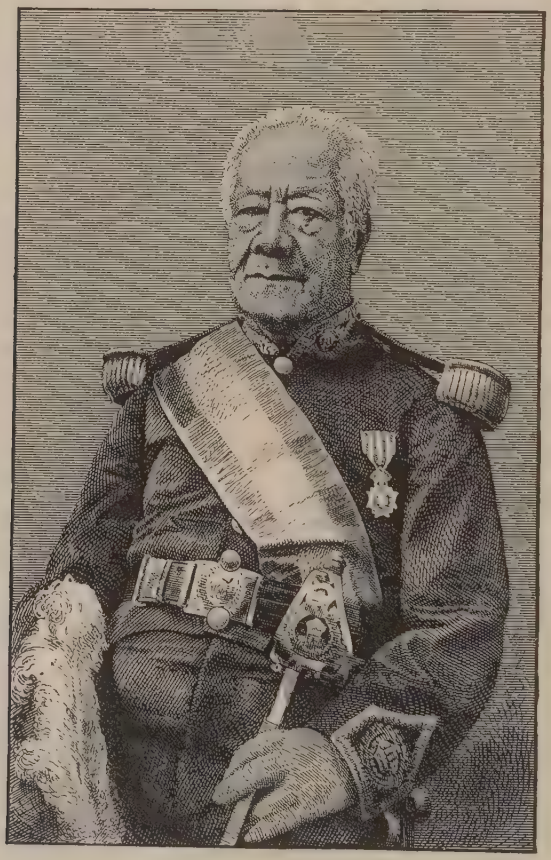


FIG. 48.—Kanoa, Governor of Kauai, Sandwich Islands. From a Photograph furnished by Miss Luella Andrews, late of Honolulu.

ethnologists hesitate to class them in the same racial group with the Chinese.

The Polynesians have often been designated a distinct race; the prevailing opinion at present seems, however, to be that they are Malays at foundation, but have been modified by accession of Papuan blood. This view is favored by the blending of the races along the line of contact; but the theory is severely strained by the superiority of the Polynesians to both Malays and typical Papuans. The Fijians, indeed, are much superior to the inhabitants of New Guinea, but the Maories, the Tahitians and the Kanaks are quite superior to the Fijians. Some of the full-blooded Kanaks express a truly Aryan intelligence. Kanoa, the governor of Kauai, presents a head and face worthy of Von Moltke. (Fig. 48.)

Intermediate between the Malays and the Chinese are the so-called Indo-Chinese, or Malayo-Chinese. These spread over the southeastern peninsulas of Asia, constituting the Burmese, Siamese, Anamese, and other nations. In the other direction they overspread Thibet, and hold some regions along the southern slopes of the Himalayas. Some tribes of Indo-Chinese approach still more nearly to the national Chinese. There is little uncertainty, therefore, in tracing them to a common stem with the Chinese. The Miao-tse, a rude people dwelling in the mountains of southern China, are primitive Mongoloids whose ancestors were apparently the aborigines of that empire, though we have no evidence of any ancestral relation to the Chinese.

As to the northern nations of Asia, while distinctly Mongoloid in languages and physical characters, they are all linguistically much farther advanced than the Chinese, and must have separated from the common

stock at a very remote period. The Japanese, though physically approximated to the Chinese, are equally related to the Tunguses; while their language proclaims a remote divarication from a stock common with the Chinese. Von Richthofen, speaking of the

FIG. 49.—Hon. Mrs. Dominis, sister of the King of the Sandwich Islands. From a Photograph furnished by Miss Luella Andrews, of Elmira, N. Y.

Coreans, says there are two types of them. (1) The noble form of the Japanese, filling the offices and carrying on the trades; (2) the smaller-bodied natives, with round heads, very prominent cheek-bones, small

eyes and sunken base of the nose,— the serving-class. These are the Coreans of early times. On closer study, there would probably be found little distinction between them and the Tungusic stems.*

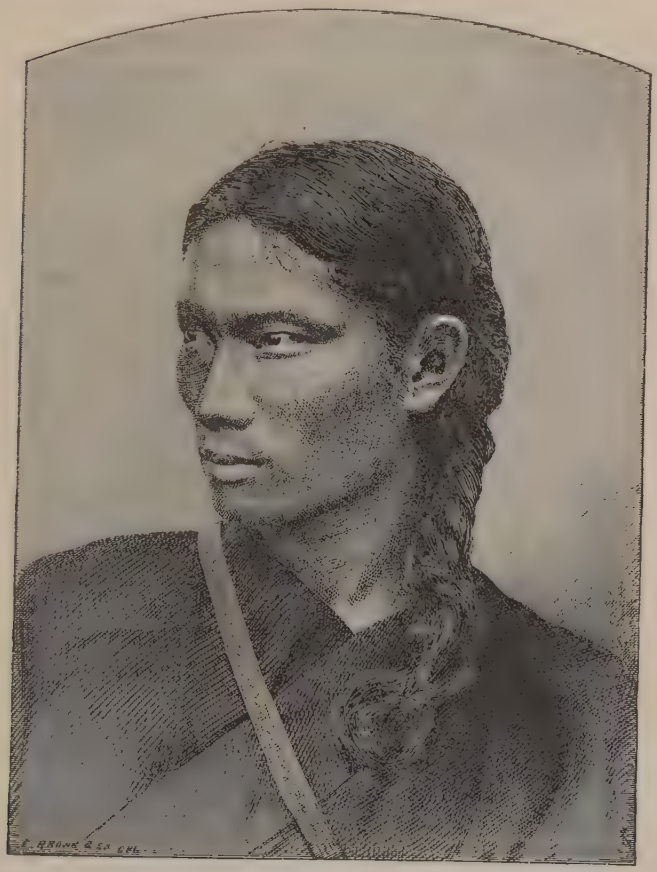


FIG. 50.—One of the Lepcha — a premongoloid type — aboriginal of Sikhim, along southern face of the Himalayas, on the western border of Bhotan. From Watson and Kaye's Photographs.

* Von Richthofen, *China*, p. 50, note.

The ethnic characters of the Mongoloids are traced throughout the two Americas in a considerable diversity of color-shades, features and social conditions, and an immense diversification of dialects, especially upon the northern continent.* The most divergent of the American types is probably that of the Innuit or Eskimo, which might with propriety be regarded as standing for a distinct race, and is sometimes so separated. The cranium is more dolichocephalous than that of the Asiatic Mongoloids, or even that of other American aborigines. It is distinctly marked by relative height, caused by the extraordinary flatness of the sides and the presence of a prominent coronary ridge. They have the most leptorhinian of all skulls, even exceeding the Mediterraneans, their nasal index being 42.33, while that of modern Parisians is 46.81, that of Polynesians 49.25, of Australians 53.39, of Nubian Negroes 55.17, and of Hottentots 56.38.† The maxillary bones are enormous, the malar bones large and thick, and the zygoma is oblique and capacious. Other cranial characters, especially in comparison with the continental Indians of northern America, are stated by Dall as follows: ‡ "The mean capacity (in cubic centimeters) of three Tuski skulls from Plover Bay [on the Asiatic side], according to Dr. Wyman, was 1,505; that of twenty crania of northern Eskimo, according to Dr. Davis,

* Major Powell insists that North America furnishes "more than seventy-five stocks of languages." (*Proceedings American Association*, Saratoga Meeting, 1879.) It is generally agreed that the languages of the feral tribes of South America are at least equally diversified.

† The nasal index expresses the relative *breadth* of the nose. It is the ratio of the breadth of the nasal opening in the skull to the whole distance from the subnasal point to the upper extremity of the nasal bones.

‡ Dall, *Alaska and its Resources*, p. 376.

was 1,475, and that of four Innuit crania, of Norton Sound [American side], was 1,320; thus showing a wide variation. The mean capacity of twenty west American Indian crania was only 1,284.06. The mean height of all the Orarian* skulls above referred to was 136.55 mill., against a breadth of 134.47 mill., while the height of the Indian skulls was 120.14 mill., against a breadth of 100.025 mill. The zygomatic diameter of the Orarian crania was 134.92 mill., while that of the twelve Indian skulls was 134.65 mill. The Orarian skulls were most dolichocephalic, and the Indian most brachycephalic. The latter averaged 378.71 cubic cent. less capacity than the former." The extreme northern Eskimo are comparatively stunted in stature; but Professor Dall reports that the Orarians generally attain a stature equal to that of their continental neighbors.

Compared further with the continental Indians, Professor Dall says: "The strength and activity of the former [Orarians] far exceed that of any northern Indians with whom I am acquainted. They are much more intelligent, and superior in every essential respect to the Indians. The language of the western Innuit differs totally in the vocabulary from that of any Indian tribes, while there are many words common to the Greenlanders and the Behring Strait Eskimo."† The settlements of the Orarians, moreover, are almost entirely littoral, and their occupations

*The term "Orarian" has been employed by Professor W. H. Dall to designate the shore-inhabiting tribes. They embrace (1) the Innuit, comprising all the so-called Eskimo and Tuski (Namollo) and (2) the Ale-uts. (Dall, *Proceedings American Association*, 1869, p. 265; *Alaska and its Resources*, 1870, p. 373; Powell's *Contributions to North American Ethnology*, Vol. I, p. 8, etc.

† Dall, *Alaska and its Resources*, p. 377.

maritime. Finally, "at no point does there seem to be any intercourse between the Eskimo and the Indians, except in the way of trade. They never intermarry, and, in trading, use a sort of jargon neither Indian nor Eskimo." *

While, therefore, we cannot fail to be impressed by the ethnic distinctions of American Orarians and American Indians of the interior, there is equally apparent an ethnic resemblance between American and Asiatic Orarians. The Chuk-luk-mut or Namollo of Prichard, residing on the Asiatic shores of Behring's Strait, are very near kindred of the Eskimo. They are essentially the same. The inland neighbors of these, the Chuk-chi, are thought by Dall to be widely distinct from the Innuit. Though in constant commercial intercourse with these, he tells us they never intermarry, use a totally distinct vocabulary and communicate only by means of a jargon. Their language is said to possess alliances with the Korak tongue, and Dall thinks them a branch of that stock.† Still, we know too little as yet about the Chuk-chi to deny dogmatically their affinity with the neighboring Namollo.

However this may be, the Namollo offer well attested relations with characteristic Asiatics. A Na-

* Dall, *Proceedings American Association*, 1869, p. 272.

† Professor Dall maintains (Powell's *Contributions to North American Ethnology*, Vol I, pp. 12–14, 103, Washington, 1877,) that the Namollo have by some authors been designated Chuk-chi only through a misapprehension. The Namollo of Prichard are the Tuski of Hooper and Markham, and the Chuk-luk-mut of Dall (in the latest publications), and are indisputably Orarian in their characters. It seems probable that the so-called Chuk-chi, with whom the Nordenskjöld expedition maintained intercourse during their winter imprisonment, were these same Namollo, often called sedentary Chuk-chi, in contrast with the migratory reindeer owners who, as Dall thinks, are the real Chuk-chi.

mollo boy whom Colonel Bulkley took from Plover Bay to San Francisco was always supposed to be a Chinese,—a mistake identical with one frequently made in reference to two native Aleut sailors in a town in which Chinese and Japanese are to be met with in every street.* Of the Namollo, Lütke affirms that they possess well marked Mongolian features in their prominent cheek-bones, small noses and frequently obliquely set eyes.†

Nor is the Asiatic affinity of the Orarians less noticeable when we turn to the study of the Aleuts. Professor Dall, who thinks the Orarians possess American rather than Asiatic affinities, insists on the marked philological divergence between the Aleuts and their Asiatic neighbors the Japanese. But physiognomic and structural resemblances bear down all such difficulties. The Aleut (Fig. 10) brought from Unalashka by Professor Dall himself was always mistaken, in Ann Arbor, for one of the Japanese students (compare Fig. 51). I feel great confidence in assuming that physiognomical resemblances so obtrusive denote close ethnic relationship. The linguistic disparity between Aleuts and Innuits is quite comparable with that between Aleuts and Japanese. Speaking of the languages of Aleuts and Innuit Kaniag-muts, Dall says: "The words, almost without exception, are quite different in the two groups."‡ Even within the bounds of the Innuit group, the Ekog-mut are said to exhibit a marked change in personal appearance, customs and *dialect* from the whole group north and east of Norton Sound. Their most noticeable personal peculiarity consists in their

* Whymper, *Alaska*, p. 273.

† Lütke, *Voyage autour du Monde*, Vol. II, p. 264, 1835.

‡ Dall, *Alaska and its Resources*, p. 386.

hairy bodies and strong beards. They are *more nearly* allied to the tribes to the south of them." * Abrupt local transitions of dialects are characteristic of uncultured tribes, destitute of writing, and living generally in comparative isolation. They are eminently characteristic of American tribes, as will be further shown. In the presence of such dialectic contrasts we find in all parts of the world conflicting but

FIG. 51.— Portrait of Okubo, a native Japanese student at Ann Arbor. From a photograph by Lewis.

* Dall, in Powell's *Contributions*, Vol. I, p. 17.

unimpeachable ethnic resemblances. I think it reasonable to maintain that physical similarities constitute the ultimate criterion of ethnic affinity. Language is something external: it may be assumed, and it may be laid aside, but no human being can escape from his skin or his cranium. Allied language is the natural outcome of ethnic kinship, but the child, under changed relations, does not always speak the language of its parents. Linguistic comparisons are only available as shedding light upon cases where the physical indications are ambiguous, or as furnishing an intimation of the length of time elapsed since separation from a common stock, or as proving former territorial relations. In some well known instances they have proved conclusive and invaluable. Ethnology concerns, fundamentally, questions of blood and physical likeness, and only accessorily, the accidents of speech. I must insist, therefore, on the ethnic kinship between the Ale-uts and the Japanese, and between the Namollo and the Chinese, as also between the Namollo and the Chuk-chi, Koraks, Itelmes, and Tunguses.

On linguistic grounds, however, we may infer that the Eskimo have lived a very long time apart from their Asiatic kindred, and that the Ale-uts have for many centuries remained dissociated from the Eskimo.* From the testimony of shell-heaps, it appears that the Aleutian Islands have been occupied by tribes of Orarian type from a period so remote that their

* Professor Dall concludes that the "Littoral" (or lower) layer in the shell-mounds of the Aleutian Islands required 1000 years for its accumulation, and the overlying "Fish-layer" and "Hunting-layer," 1500 to 2000 years. He thinks 3000 years are not too high an estimate for the duration of Aleutian occupation of these islands. See also Powers, in Powell's *Contributions*, Vol. III, p. 216.

populations "were without houses, clothing, fire, lamps, ornaments, weapons (unless of the most primitive kind), implements of the chase, for fishing or even for cooking what they might have found upon the shore." * The Ale-uts are now half-civilized. If such changes have taken place in customs since the beginning of Aleut occupation, what transformations may not have been experienced by their language? And what dependence can be placed on the inference that their primitive language was unlike that of their nearest Asiatic neighbors, because its present outcome is so widely divergent?

Further southward, along the northwest coast of America, dwell numerous other tribes which, according to the accounts, must be widely distinguished from the Hunting Indians of the interior. The Tlinket or Koloshian family, consisting of several tribes, are represented as lighter colored than any other North American aborigines. They have, indeed, been described as "having as fair a complexion, when their skins are washed, as the inhabitants of Europe; and this distinction, accompanied sometimes with auburn hair, has been considered as indicating an origin different from that of the copper-colored tribes." † The hair, however, is generally black and stiff. Dall includes in this family the Yakutats, the Chilkaht-kwan, the Sitka-kwan, the Stakhin-kwan and the Kygahni (or Haidahs), stretching from near Mt. St. Elias to Queen Charlotte's Island. To the same family probably belong the Hailtsa, on the mainland, the Nanai-muk, Kowitsin and Klalam of Vancouver Island and the adjacent mainland of Washington, as well as the

* Dall, in Powell's *Contributions*, Vol. I, p. 55.

† *Encyclopædia Britannica*, Vol. I, p. 690, art. "America"; Peschel, *Races of Man*, p. 398.

Tsinuks (or Chinooks), who occupy the basin of the Columbia river to the Dalles. The latter have the obliquely slit eyes which proclaim their Mongoloid origin. These tribes speak a great variety of dialects, but they are not distinguishable from each other by their physical characters. The late Governor J. Furuhelm says: "The customs of the different tribes inhabiting the coast from Puget Sound to Mount St. Elias, as well as the islands known as the Prince of Wales and King George archipelagos resemble each other very much."* Professor Dall tells us that Eskimo dialects are spoken (by the Ugaluk-mut) as far south as Mount St. Elias. Lütke expressly states that the inhabitants of Queen Charlotte's Islands cannot be distinguished physically from the people living on the shores of Behring's Sea. Latham comments on the contrast between the Eskimo type and that of the Hunting Indians on the Atlantic coast, and the absence of such contrast between the Eskimo and their neighbors on the Pacific coast. "These [the Eskimo of Russian America] are so far," he says, "from being separated by any broad and trenchant line of demarkation from the proper Indian, or the so-called Red Race [by which he means *all* northern Americans except Eskimo, while clearly referring here to the coast tribes which I have distinguished from those of the interior], that they pass gradually into it; and that, in respect to their habits, manner and appearance, equally. So far is this the case that he would be a bold man who should venture, in speaking of the southern tribes of Russian America, to say, Here the Eskimo area ends, and here a different area begins." †

* Furuhelm, in Powell's *Contributions*, p. 111. Furuhelm was governor of the Russian-American colonies.

† Latham, *Varieties of Man*, p. 291.

It seems very certain, therefore, from all the evidence, that the natives of the northwest coast are closely akin to the Ale-uts and the Eskimo, and may fairly be regarded as a southward prolongation of the Orarian type characterized by Dall. But, according to Gibbs, the tribes above mentioned from Washington territory belong in the great Selish family, with all the other tribes of Washington north of Mount St. Helen's, and west of the Cascade Mountains, except the Makah of Cape Flattery (of the Nutka family) and the Owillapsh of the Tinneh family. The Sahaptin tribes south of Mount St. Hèlen's and the Tsinuk of the Columbia river are closely related, while the latter are physically undistinguishable from the tribes farther north.* The tribes of the Selish family are known to be settled also far up the Columbia river, as far as the national boundary, and on Clark's Fork, and on the Okinakaine, and also along the Fraser river, up to its "middle course."

Most of the tribes of Californian Indians, according to the fascinating descriptions and narratives of Mr. Stephen Powers,† are not only related physically and socially to each other, but are widely distinct from the Hunting Indians of the interior of the continent. With such physical resemblances, it may by some be regarded as somewhat surprising that their languages are so distinct and so numerous. If, however, this fact were quite inexplicable, I should feel bound to give precedence to physical traits in the matter of ethnological evidence. But it appears, contrary to general belief respecting the persistence of language,

* Dr. George Gibbs, in Powell's *Contributions*, Vol. I, pp. 170–1, 241.

† Powers, in Powell's *Contributions to North American Ethnology*, Vol. III.

that the diversification of tongues proceeds, in California and other parts of North America, with unexpected facility and rapidity. Lieutenant Ives, referring to the diversity of languages among the racially identical and locally approximated inhabitants of the Pueblos of the Colorado valley, states that different villages within a circuit of ten miles speak three different languages. "The people are indolent and apathetic, and have abandoned the habit of visiting each other till the languages which, with all Indian tribes, are subject to great mutations, have gradually become dissimilar. These Indians are identical in race, manners, habits and mode of living."* Dr. George Gibbs, speaking of the Indians of Washington territory, says: "Dr. Newell states that, since he was first in the Indian country, all the great tribes have been gradually breaking up into bands. . . . It is to this separation, and to the petty hostilities which often grow out of it, that we must mainly attribute the diversity of dialects prevailing."† The same statements may naturally be made of the tribes of California. Mr. Stephen Powers tells us that the Hupa (see Fig. 52) "are the French in the extended diffusion of their language." They compel all their tributaries to speak Hupa in communicating with them. "A Mr. White, a pioneer well acquainted with the Chi-mal-a-kwe, who once had an entirely distinct tongue, told me that before they became extinct, they scarcely employed a verb which was not Hupa. In the Hupa reservation, in the summer of 1871, the Hupa constituted not much more than half the occupants, yet the Hupa was not only the French of the reservation, . . . but it was also in general use within

* Ives, *Colorado Exploring Expedition*, p. 127.

† George Gibbs, in Powell's *Contributions*, Vol. I, p. 225.

each rancheria. . . . Among the tribes surrounding the Hupa, I found many Indians speaking three, four, five and more languages, always including Hupa, and generally English."* All these facts reveal a state of linguistic instability among the West-coast Indians which is quite at variance with principles induced from the study of the more perfected and copious languages of the Old World, but which, nevertheless, may easily be believed characteristic generally of the languages of unsettled and uncultured populations. I feel justified in concluding, therefore, that the Californian Indians, excepting a few tribes of the Tinneh family, and possibly also the Shoshoni, are not only ethnologically and closely affiliated to each other, but stand in similar relations to the tribes of Oregon, Washington and Vancouver Island, and contiguous portions of British Columbia. It is only a slightly increased differentiation which separates them from the Tlinkets, Haidah and Nassee, and finally the Eskimo and Aleuts of the extreme northwest.

These tribes are all orarian or riparian in habitat and habits. They subsist upon the products of the waters and such fruits and roots as the several zones of latitude afford. They are all characteristically ichthyophagous, and, as far south as Cape Flattery, the Makah pursue the whale in the open sea, and, Eskimo like, make food of the blubber and the oil. They build their habitations by the water's edge, and make them permanent. Their disposition is generally mild, in contrast with the fierce, revengeful and scalp-lifting warriors of the interior of the continent. In stature they are mostly short. In physiognomy the cheek-bones are less prominent, the nose is straighter and the face less oval than among the hunting tribes.

* Powers, in Powell's *Contributions*, Vol. III, pp. 72–3.

FIG. 52.—A Hupa Woman, of California. Type of Asiatic Americans. After Powers, in Powell's *Contributions to the Ethnology of North America.*

Many other common traits distinguishing them from the Hunting Indians might be enumerated if I were

Fig. 53.—Spotted Tail, chief of the Brulé Sioux, a tribe of Hunting Indians. From a photograph by W. H. Jackson, of Hayden Geological Survey. Type of Polynesian Americans.

drawing up a monograph of American aborigines, but enough has been presented, I think, to indicate the grounds of the conclusion that the Pacific-coast Indians generally, from Behring's Strait to the Gulf of California, are descended from a common stock at some period not ethnically remote; and that the Eskimo of the Arctic shores, and consequently of Greenland, are their very near relatives; and finally, that all these tribes bear so distinctly an Asiatic stamp as to point to the Mongoloid regions of the Old World as the home of their remote ancestors.

The civilized tribes of North and South America present to the investigator of their near ethnological affinities some of the most perplexing of problems. Buschmann, who studied especially the languages of Mexico, united in a single group, called Sonoran, a large number of North Mexican and New Mexican languages.* All these languages present recognizable affinities with the Nahuatl, and have many words in common. To this family, apparently, belong the languages of the Moqui, as well as of the Comanches, Utahs, Pah-Utahs and all the so-called Diggers of California, and perhaps the Shoshoni. The Californian Indians, nick-named "Diggers," I have regarded as physically inseparable from their northern coastwise neighbors. Will it be admissible to bring all these into physical approximation to the tribes speaking the Sonoran family of languages? The final answer to the question must await further consideration. Meanwhile, in spite of linguistic obstacles, I shall yield to the evidences of form, structure and psychic traits, and reply with a provisional affirmative. This

* Buschmann, in *Abhandlungen der Berliner Akademie der Wissenschaften*, 1863. See, in connection with this discussion, his earlier work, *Astekische Ortsnamen*, Berlin, 1853.

conclusion involves all the civilized nations of Mexico and central America, since though the Nahuatl prevailed in its purity only in the neighborhood of the Mexican capital, traces of it exist from New Mexico

Fig. 54.—Numpayu, a Moqui maiden. Type of the Asiatic Americans. From a photograph by W. H. Jackson.

to the Lake of Nicaragua. It is probable, also, that the Quichés, of Guatemala, and their allied neighbors the Maya of Yucatan, as well as the Toltecs, the kinsmen and predecessors of the Nahuatl Aztecs

FIG. 55.—A Mut-sun Woman of Tuolumne county, California. Photograph by D. Sewell, Sonora, California.

and Tlascalans, are all to be brought together in one great ethnic family.

The civilized Peruvians knew nothing of the civilization of Mexico and central America, or of the lan-

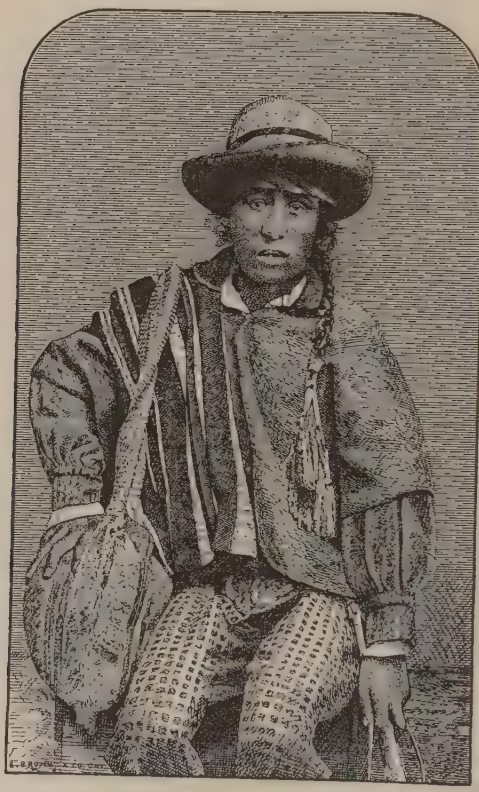


Fig. 56.— A Quichua Indian of Peru. From the mountains east of Lima. From a Photograph obtained by Prof. J. B. Steere.

guages spoken north of the Isthmus of Darien. This, however, as I maintain, is not conclusive evidence that the Peruvians and Mexicans had not lived together in America at some remote period. With the Quichuas

of Peru we must class, ethnologically, the Muysca or Chibcha of Bogota, the Colla or Aymara on Lake Titacaca, and perhaps the divergent but civilized Yuncas of the west slopes of the Andes.

Finally, we find the Eskimo type even among the primitive Patagonians. Of five skulls taken from prehistoric burials, M. Topinard writes as follows: "At first sight one would think they were the skulls of Eskimo. The narrowness of the forehead, its height, its bulging at the level of the frontal bosses, the antero-posterior elongation of the cranium, its posterior part in the form of an inclined plane, and then curved round; the height of the vertical diameter, or acrocephaly, the vertical direction downward of the sides, the elongation of the face, the projection forward of the malar bones, the degree of prognathism, the narrowness of the interval between the orbits, the harmony of form between the cranium and the face,—all this is Eskimo. The teeth themselves are worn down horizontally, as in this race."* It is true that some of the other skulls varied from this description, but the average of twenty-seven in respect to dolichocephalism was 75.92.

These indications of the presence of the Peruvian type in the extreme south of the continent are quite confirmed by the existence of mummies in rockshelters upon the northwestern coast of Patagonia. One of these has been deposited by the discoverer, Dr. Aq. Ried, in the museum at Ratisbon, Bavaria, and another was sent to the Smithsonian Institution.† These mummies, like those of Peru, are found in a sitting posture, with some simple articles of use and convenience by their side. The humid atmosphere of Patagonia, so

* Topinard, *Anthropology*, pp. 482–3. Compare *antea*, p. 405, seq.

† Aq. Ried, *Smithsonian Annual Report*, 1862, pp. 87, 426.

unlike that of Peru, leads to the inference that the mummification of the dead was practiced under the influence of some controlling motive, which must have been inherited from ancestors dwelling in a more propitious clime, and which even the dripping meteorology of Patagonia was insufficient to eradicate.

Dr. Morton, the distinguished American craniologist and ethnologist, insisted upon the racial unity of the American aborigines, and their distinctness from the Mongolian type.* In dissenting from positions so generally accepted † on the high authority of Dr. Morton, I have the support of recent ethnological writers of the highest rank. Professor Retzius, a pioneer in exact craniometry, says: "It is scarcely possible to find anywhere a more distinct distribution into dolichocephali and brachycephali than in America. . . . From all, then, that I have been able to observe, I have arrived at the opinion that the dolichocephalic form prevails in the Carib Islands and in the whole eastern part of the American continent, from the extreme northern limits to Paraguay and Uruguay in the south; while the brachycephalic prevails in the Kurile [Aleutian?] Islands and on the Continent, from the latitude of Behring's Strait, through Oregon, Mexico, Ecuador, Peru, Bolivia, Chili, the Argentine Republic,

* Morton, *Crania Americana*, p. 260, *et passim; Ethnology and Archæology of American Aborigines*, p. 9; Schoolcraft, *History of the Indians*, Vol. II, p. 316. Humboldt also says "The nations of America, except those which border on the polar circle, form a single race, characterized by the formation of the skull, the color of the skin, the extreme thinness of the beard, and straight glossy hair."

† Stephens, *Yucatan*, Vol. I, p. 284; Nott and Gliddon, *Types of Mankind*, chap. ix; *Indigenous Races of the Earth*, pp. 332–7; Agassiz, in *Types of Mankind*, p. 69. In this category might also be named Lawrence, Wiseman, Squier, Meigs, and, until a recent date, the generality of writers on American ethnology.

Patagonia to Terra del Fuego."* . . . "The brachycephalic tribes of America are found, for the most part, on that side of the continent which looks toward Asia and the islands of the Pacific, and they seem to be related to the Mongol races." Dr. Daniel Wilson has advanced very similar views,† and has supplied tables of measurements from 289 skulls by which the question is placed beyond all possible controversy.

It remains to note that the Pacific-slope type of skull pervaded not only the regions found by the Spaniards in possession of the civilized nations, but the entire continent, as far at least as the relics of the Mound-builders are distributed. The Mound-builders were certainly of the cranial type of the ancient Mexicans and Peruvians, and thus of the cranial type of all the natives of the Pacific slope, at least as far as Sitka. After the personal comparison of Peruvian skulls,‡ with authentic Mound-builders' skulls from Michigan and Indiana, and others from dolmens and mounds in central Tennessee, I feel confident that the identity of the race of Mound-builders with the race of Anahuac and Peru will become generally recognized. So far as skulls from the mounds were known to science during Dr. Morton's lifetime, he recognized their close affinity with the ancient Peruvian and Mexican; but Dr. Wilson has insisted upon this affinity with a more considerable array of meas-

* Retzius, *Present State of Ethnology in Relation to the Form of the Human Skull*, translated for *Smithsonian Annual Report*, 1859, pp. 264, 267.

† Wilson, *Canadian Journal of Industry, Science and Art*, Nov. 1856 and 1857; Edinburgh *New Philosophical Journal*, Jan. 1858; *Smithsonian Annual Report*, 1862, p. 246, *seq.*

‡ Collected and deposited in the Museum of the University of Michigan, by Professor Joseph B. Steere, Ph.D.

urements to sustain the position;* and has shown that numerous existing tribes of the south and southwest are similarly brachycephalic. The Abbé Brasseur de Bourbourg,† after the ablest and most extensive researches, declares that the preaztec Mexicans or Toltecs were a people identical with the Mound-builders. The Mexican records indicate that they migrated from a country lying to the northeast, known as old Tlapalan, and that they were expelled by the hostility of the Chichimecs or barbarous tribes. The Toltecs or Nahuas displaced a still older and somewhat civilized people, the Colhuas. It was the relics of Toltecan civilization, according to Stephens, which the Spanish conquerors found in central America; and there is little hazard in inferring the same idenity in the sources of Peruvian and Mexican civilization as we find in the racial characteristics of the ancient inhabitants of those countries.

Colonel J. W. Foster,‡ after much personal study of this subject, concluded that the Mound-builders possessed a conformation of skull "which was subsequently represented in the people who developed the ancient civilization of Mexico and central America," and that "this people were expelled from the Mississippi valley by a fierce and barbarous race, and that they found refuge in the more genial climate of central America."

I have included the Pueblo Indians of North America under the type of Asiatic Americans (p. 333). There is little room for doubt that they are the descendants of the builders of the cliff-dwellings, which

* Wilson, *Smithsonian Annual Report*, 1862, pp. 248, 250, 254, 263.

† See Baldwin's *Ancient America*, p. 201, seq.

‡ In his valuable work, *Prehistoric Races of the United States*, 3d ed., Chicago, 1874, pp. 350, 351.

have been so happily described and illustrated by Jackson and Holmes, in connection with Dr. Hayden's survey of the territories.* Dr. E. Bessels says: "There is not much room left to doubt that the present Pueblo Indians are the direct descendants of the ancient inhabitants of southern Colorado and New Mexico."† What is more important in the present connection is his decided identification of the cranial type of the mesa ruins, or ancient cliff-dwellings, with that of the Peruvians and that of mounds in Tennessee. "Skull No. 1179," he says, "might very well be taken for that of an ancient Peruvian" (p. 55). "To show the resemblance between the skulls from southern Colorado and New Mexico . . . and those of the ancient Peruvians," a diagram is given by Dr. Bessels, in which several profiles are superposed, showing marked coincidences. Finally, writing in reference to the report of a ceiling in one of the cliff-dwellings which had been *arched* at the height of twenty feet, over a room twenty-five or thirty feet in diameter, Dr. Bessels remarks, "There are but two tribes inhabiting this continent whose architectural skill proved efficient enough for this purpose, namely, the Peruvians *and the Eskimos*" (p. 61).‡

Contrasted with this round-headed and thin-skulled type stretching from Sitka along the western slope of America, as far as the Straits of Magellan, is the long-headed, thick-skulled and oval-faced Indian of

* See especially Jackson, in *Hayden Annual Report*, 1874, pp. 369–81, with plates; and *Hayden Annual Report*, 1875, pp. 12, 23–4; and Holmes and Jackson, in *Hayden Annual Report*, 1876, Part III, pp. 383–457, many illustrations.

† Bessels, in *Bulletin of Hayden Survey*, Vol. II, p. 61.

‡ The racial identity of Mound-builders and the Pueblo Indians has been admitted by L. H. Morgan, *North American Review*, CIX, 409, Oct. 1869.

the interior. This sub-racial type stretches, in North America, from the Yukon river to the borders of Mexico, and eastward to the Atlantic ocean. Its numerous tribes are grouped in families, less upon physical than upon linguistic and social grounds; though physiognomic and structural characters present diversities similar to those observed among the Chinese and Japanese. The most widely distributed family is that of the Tinneh, otherwise known as the Chippewayans or Athabaskans. This stretches from the delta of the Yukon eastward to the watershed, separating the basins of the Athabaska and M'Kenzie rivers from that of Hudson's Bay, and thence southward, principally along the flanks of the Rocky Mountains. Some tribes reach the western sea-coast in Alaska, British Columbia, Washington, Oregon and California. To this family belong the Navahoes, who extend eastward of the Colorado to the highlands of Mexico; the Apaches, ranging over western Colorado and into the Mexican states of Chihuahua and Coahuila, and also another southern tribe, the Lipans, located in Texas, near the mouth of the Rio Grande del Norte.

The territory of the Algonkin family extended from the sources of the Missouri river eastward, spreading especially over the regions east of the Mississippi, and included the well known tribes of Blackfeet, Ojibways, Crees, Shawnees and the "Five Nations" of the Middle and Eastern States. The Iroquois family were located in Canada, in the midst of Algonkin territory. The Dakotah or Sioux family dwell between the Rocky Mountains and the Mississippi. A considerable number of other tribes have not yet been grouped in families. Among them are the Pawnees and Ricarees of the Rocky Mountain region, the Choc-

taws and Chickasaws of the southeast portion of the United States, allied to the Muskogees and Seminoles, the Cherokees of the Carolinas, and sundry tribes of Texas. It is probable that most of these belong to the brachycephalic sub-race.

The Hunting Tribes of South America are more diversified than those of the North, both in respect to ethnic characters and languages, and social condition. But everywhere are noticeable some of the fundamental characteristics of the Mongoloid type of man. On linguistic, and partly on physical, grounds they have been grouped in families, but I shall not occupy space to enumerate them here.

I desire now to direct attention to the ethnic affinities existing between the Hunting Tribes of the North American Indians and the Polynesians, who are generally regarded as Mongoloid at the foundation. Both races are characterized by a brownish-olive color. Both races are tall, and in height surpass the Mongoloid Asiatics; the eyes are straight, while obliquity is of frequent occurrence among tribes more distinctly Mongoloid; the nose, sometimes Asiatic, is more frequently large, prominent, bridged, and even aquiline; this is a Papuan character, while the typical Mongoloid nose is short and depressed; the face is oval, and not flat, and it is longer than in Asiatics; the cranium is smaller and more dolichocephalous, and the face less prognathous. Add to this that the Sumpitan or blow-gun, a hunting weapon, is used by the tribes of New Guinea, as well as by those of the Amazons and Orinoco, and we have a catalogue of resemblances worthy at least to arrest serious attention.

I recognize, therefore, among American aborigines, two general stocks of Mongoloids; one is Asiatic, and connects itself, structurally and geographically,

with the nations of northern Asia; the other is Polynesian.*

This theory, it must be confessed, encounters a difficulty in the marked dolichocephalism of the Eskimo. If the dolichocephalism of the continental Indians is made a ground of distinction from the west-coast type, is it not an adequate ground for distinguishing the Eskimo from that type and uniting them with the continental Indians? On this subject I offer the following suggestions:

1. No ethnologist, not even Morton, the great defender of American unity of type, has ever united the Eskimo with the continental Indians in consequence of their dolichocephalism or other cranial characters, nor in consequence of any affinity presented by the sum of their ethnic characters. Not a few have set them down even as a distinct race.†

2. Most ethnologists admit that the Eskimo type reaches to the Siberian Tuski (Namollo, or Chuk-lukmut) and the Ale-uts, which present the first step of closer approximation toward Asiatic Chuk-chi on the one hand, and American Tlinkets on the other.

3. The western Eskimo are distinctly less dolichocephalic than the eastern. The mean index of 21 Greenland Eskimo was 71.7 (Broca), and of 100 cra-

* Some appropriate terms are needed to express the distinction, recognized in this work, between the affiliated tribes of the north and west coasts of America, living mostly in villages or somewhat fixed abodes, and the feral hunting tribes without fixed habitations. I have hesitated to extend the term "Orarian" to all the former, both because many of the tribes, like the Pueblos and Comanches, are not shore-inhabiting, and because such an extension of the application of the term might not be sanctioned by the proposer. I suggest, therefore, the name *Sedentes* for the sedentary or village Indians, and *Vagantes* for the wandering or hunting Indians. These terms imply nothing in reference to ethnic origin or relations.

† See the comparisons made, pp. 163, 164, 166, etc.

nia, by Hays, 70.7. The mean index of six northwest American Eskimo was 75.1, and of eleven Asiatic Eskimo 79.5, which brings the last named Eskimo almost to the borders of brachycephalism.

4. Numerous observers, as I have shown, maintain a substantial identity of type from Puget Sound to Behring's Straits, in spite of increasing dolichocephalism northward.

5. The Mongoloid race is not characterized by any standard degree of dolichocephalism. Aside from Eskimo, the race presents a wide range in the value of the cranial index. The Chinese are sub-dolichocephalic, having an index of 77.6; the Turks are sub-brachycephalic, having an index of 81.5; the Indo-Chinese are brachycephalic, having an index of 83.5, while the Lapps, sometimes grouped with the Eskimo in a "Hyperborean race," have an index of 85.1.

We must conclude, therefore, that the cranial index is only one of the characters on which a natural ethnic classification must be based; that it presents a considerable range among people whom a comprehensive judgment would pronounce identical, and that its indications may sometimes be entirely overborne by the weight of evidence drawn from the totality of characters.

It only remains, in discussing the genealogy of the Mongoloids, to remind the reader that this type included the prehistoric inhabitants of Europe. It is impossible, however, to indicate at present any particular family of Mongoloids to which these people may be certainly affiliated. It is likely, nevertheless, that their closest genetic relations are with certain Mongoloids now occupying northwestern Asia, and the Arctic shores of Europe.*

* Some facts bearing on this relation to the Mongoloids are furnished in chapter xi.

CHAPTER XXI.

GENEALOGY OF THE WHITE RACE.

WE now reach the question of the nature of the connection between the Brown races and the White. Did the White race make its appearance after the Mongoloid and the Dravidian types had become differentiated? And was it derived from one of these? Or was the White type derived directly from one of the Black races?

I have heretofore assumed the possibility that the Brown races are Adamic; though I have indicated a leaning toward the opposite view. The question confronts us here for a decision. Which is most probable — that the highest race should proceed directly from one of the lowest, or that it should issue from one of the races between it and the lowest? On scientific grounds, the question admits of but one answer. I will remind the reader, also, of three considerations of a concurring tendency: 1. The passage from the White to the Brown races would be a racial retrogression; and this, as I have shown, conflicts with the general method of nature. 2. The Mongoloid race has become so populous and so widespread, and was so populous and widespread at the earliest dawn of history, and even of tradition, that it seems improbable that the 1656 years between Adam and the Flood (according to popular chronology) were sufficient time to lay the foundations of so vast a race. 3. The people with whom Cain affiliated so naturally could not have been racially as divergent as one of the Black types.

If it is asked what has become of the posterity of Cain, or of other nonsethite sons of Adam, it may be replied that Cain's posterity became merged into the type of Mongoloids or Dravidians; and other posterity of Adam perished with the Sethites, in the flood.*

I feel constrained, therefore, to assume tentatively, that we must look for the descent of the Adamites from a Mongoloid or a Dravidian stock. The Turkish Osmanlis and Turcomans approach, physically, nearer to the Mediterranean stock than any other Mongoloids. Their geographical position, moreover, in the regions about the Caspian sea, and the eastern shores of the Euxine, is geographically approximated to the Adamic seat. Of the Turcomans, Vambéry says that they alone of all Mongolians do not possess high cheek-bones, and the blonde color is predominant among them. Next follow the Karakalpaks, whose women, with a white color and large dark eyes, pass for good-looking. Then come the Kirghis, whose women and children have generally a white, almost European, complexion.† At a date as remote as Adam, however, the Turkish stock may have had a home much farther removed from Eden.‡ It is also some evidence of Mongoloid affinities, that the earliest Noachites who have left traces of their language in Mesopotamia seem to have spoken a dialect possessing Turanian elements. On the contrary, the hair of the Mongoloids generally is straight, black and coarse;

*The Usün were a fair, blue-eyed people in northeastern Asia many centuries before our era, against whom the Turkish Hiong-Nu made persistent war. Who were the Usün? Who were the similar Ting Ling and Kiekars? Perhaps Cainites; perhaps Sethites not in the line of Noah. Are not the Finns the descendants of these?

† Vambéry, *Sketches in Central Asia*, p. 284.

‡ This, we shall see, was the fact.

and the body is sparsely supplied with a pilous growth. The Turks, however, in this respect deviate from the normal Mongoloids. The zygomatic arches of the Mongoloids are also more prominent than those of the Mediterraneans; the nose is flatter, and the eyes generally more oblique.

Turning to the Dravida, we find conditions, perhaps, still more favorable to the hypothesis of a direct genetic relationship with the Adamites. 1. Their geographical position, from the earliest times reached by history or monuments, has been approximate to the accepted location of the Adamic Eden. 2. Their hair is dark and curly, according to the type of the Adamites. 3. Their complexion ranges from dark reddish to brownish and blackish, and exhibits a series of transitional states between Australians and Mediterraneans such as to sustain the hypothesis of a genetic passage. 4. The recognized affinity of their languages with the Turanian stock would explain the presence of Turanian elements in the Accadian of the early Hamite (p. 137).

As bearing on this affinity, I make the following quotations. Mr. Brace says: "The Toda in the Nilghiri hills are remarkable both for having been untouched by sanscrit influences, and for their fine personal appearance. Some of them are said to present strikingly the Roman cast of features; their figures are tall and athletic, complexion brown, and beards bushy. The women have long black hair and beautiful teeth, and are fairer than the men."* Of the Bhotiya tribes, also Dravidians, Brace says: "Their physique is not materially different from that of the Tamuls. They are of pale brown complexion and

* These statements are sustained by Captain Harkness. (Prichard, *Natural History of Man*, I, pp. 253–4.)

Turanian type of features. Some individuals have a high degree of personal beauty, almost Aryan in type."* Dr. John Davy, after describing a fine

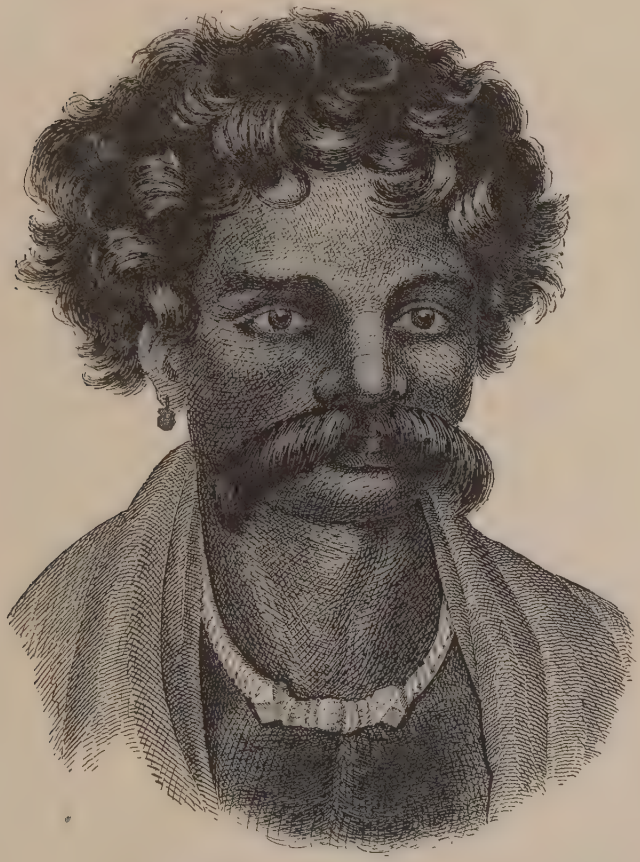


FIG. 57.—A Dravidian of the Toda tribe, Nilghiri Hills, in southern India. Supposed to represent the stock from which Adam sprang. Skin of the color of "burnt umber."

* Brace, *Races of the Old World*, pp. 144, 146.

albino girl of Ceylon, adds: "It is easy to conceive that an accidental variety of the kind might propagate, and that the White race of mankind is sprung from such an accidental variety. The [East] Indians are of this opinion; and there is a tradition or story among them in which this origin is assigned to us."*

Of the moral qualities of the aborigines of India in general, the following high testimony is rendered by General Briggs:† "The man of the ancient race scorns an untruth, and seldom denies the commission even of a crime that he may have perpetrated, though it lead to death. He is true to his promise, hospitable and faithful to his guest, devoted to his superiors, and is always ready to sacrifice his own life in the service of his chief."

On the whole, I think the Dravidian presents rather the most probable point of connection between the Adamites and the older races.

The ethnological affinities of the posterity of Adam have been already traced,‡ and need not be repeated in this place.

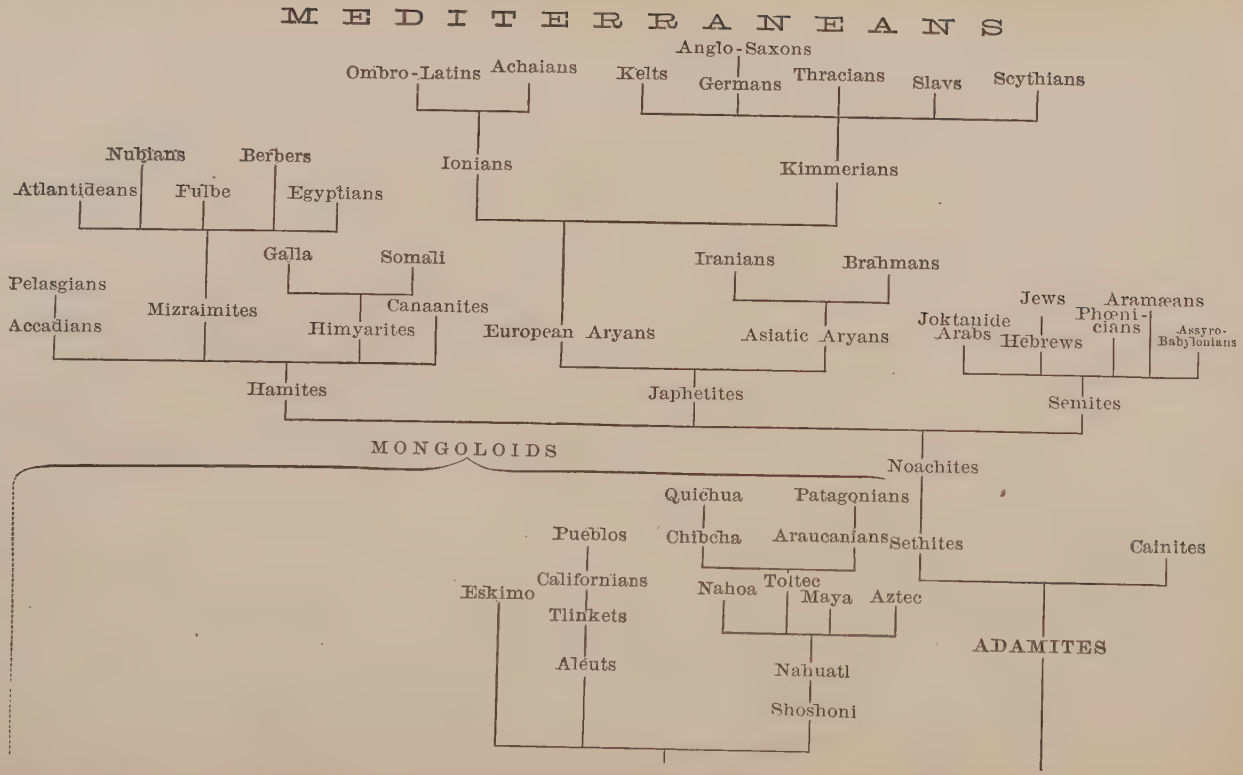
* Davy, *Account of the Island of Ceylon.*

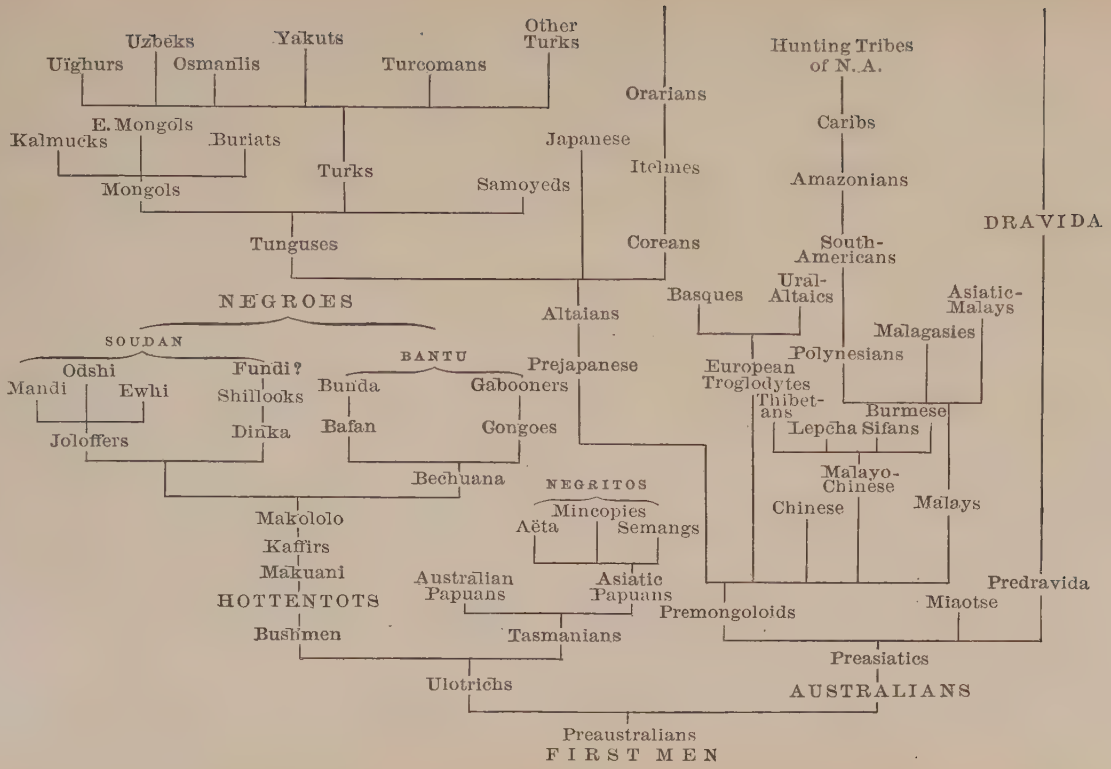
† Briggs, in *Royal Asiatic Society's Transactions*, Vol. XIII.

‡ Chapters iii, iv and v. It has been maintained by some ethnologists that the Caucasians, so-called, do not constitute a single race. Schaffarik says: "On one side the so-called Semites, that is, Arabs and Jews, and on the other the Finns and Turks, are so very distinct, linguistically, from the Indo-Europeans, that we cannot possibly place them as stems of the same race in a common circle of relationship." (Schaffarik, *Slavische Alterthümer*, I, pp. 25, 26.) But, as to the Finns and Turks, it is not claimed that they are coracial with the Indo-Europeans. As to the Semites, every physical and monumental indication points to their affiliation with the Aryan stock; and we even get, in the primitive Accadian, some *linguistic* glimpses of a common ethnic status. (Compare Sir Henry Rawlinson, *Journal Geographical Society*, London, 1873, "On the Nationality of the Hazareh.") Theodor Poesche asks: "How shall we include in one

The genealogical tree of the types of mankind may be represented by a diagram like that on pages 352–3. Any diagram like this, however, must necessarily be, to a large extent, tentative. Nevertheless, science is attaining constantly to more exact knowledge respecting the affinities of human types, and each year's results enable us to construct tables more reliable than before. It must be distinctly understood, however, that the doctrine of Preadamitism does not depend on the correctness of any general table of affinities. It only implies the truth of the single feature of the genealogical tree, which represents the Adamites as springing from some point above the base, instead of standing, where I have put the Australians, at the base. Any research into the genealogy of races must be regarded, therefore, as only a pendant to the main discussion; though a line of research to which we naturally turn as soon as we entertain the conception of races older than Adam.

race Lapps with globular [kugelförmigen] heads; pronounced 'long-heads,' as in Sweden; small and graceful South Arabians with blue-black hair, and only sparse beards; and gigantic, blonde and heavy-bearded Germans?" (Poesche, *Die Arier, Ein Beitrag zur historischen Anthropologie*, Jena, 1878, p. 6.) Here again we recognize the Lapps as Mongoloids; and as to the other types mentioned, I quite agree with the majority of anthropologists, that they are not so physically divergent from the predominantly mesocephalic Aryans as to justify the recognition of racial distinctness.


MEDITERRANEANS
Anglo-Saxons
Ombro-Latins
Achaians
Kelts
Germans
Thracians
Slavs
Scythians
Nubians
Berbers
Ionians
Kimmerians
Atlantideans
Fulbe
Egyptians
Galla
Somali
Iranians
Brahmans
Pelasgians
Jews
Aramæans
Canaanites
Joktanide Arabs
Phœnicians
Mizraimites
Accadians
Himyarites
European Aryans
Asiatic Aryans
Hebrews
Assyro-Babylonians
Hamites
Japhetites
Semites
MONGOLOIDS
Noachites
Quichua
Patagonians
Pueblos
Chibcha
Araucanians
Sethites
Cainites
Californians
Nahoa
Toltec
Eskimo
Maya
Aztec
Tlinkets
ADAMITES
Aleuts
Nahuatl
Shoshoni


Other Turks
Uzbeks
Yakuts
Uighurs
Osmanlis
Turcomans
Hunting Tribes of N. A.
Orarians
Caribs
E. Mongols
Kalmucks
Buriats
Japanese
Itelmes
Amazonians
Turks
Samoyeds
Mongols
DRAVIDA
Tunguses
Coreans
South-Americans
NEGROES
Basques
Ural-Altaics
Asiatic-Malays
Altaians
Malagasies
SOUDAN
BANTU
Polynesians
Odshi
Fundi?
Prejapanese
European Troglodytes
Mandi
Ewhi
Bunda
Gabooners
Thibetans
Burmese
Shillooks
Bafan
Congoes
Lepcha
Sifans
Joloffers
Dinka
Malayo-Chinese
Bechuana
NEGRITOS
Chinese
Malays
Mincopies
Makololo
Aëta
Semangs
Kaffirs
Predravida
Makuani
Australian Papuans
Asiatic Papuans
Miaotse
HOTTENTOTS
Premongoloids
Bushmen
Tasmanians
Preasiatics
Ulotrichs
AUSTRALIANS
Preaustralians
FIRST MEN

CHAPTER XXII.

THE CRADLE OF HUMANITY AND DISPERSION OF THE BLACK RACES.

THE CRADLE OF HUMANITY.

ANOTHER inquiry to which attention may appropriately be turned in this connection, is that concerning the earliest home of mankind, and the method of their dispersion over the earth. If all mankind have descended from one primitive pair, which is not probable, it is legitimate to search for their dwelling-place. If the earliest representatives of humanity appeared in considerable numbers, as every other new type seems to have revealed itself, it is not at all probable that they appeared simultaneously in different quarters of the world. The supposition is opposed to the observed fact of lines of relationships converging toward one type and one place. It is a fact, also, that the progress of human dispersion over the earth has been remarked during the period of written history. We have traditional, and even historical, information concerning the spread of races and nations into regions remoter from an assumed primitive center. Most of the islands of Polynesia have been populated since the Christian Era. "All the oceanic islands," says Peschel, "that is, such as lie at considerable distances from continents, have, with few exceptions, been found uninhabited by European navigators."* This was the case with

* Peschel, *Ausland*, Jahrgang 1869, S. 1106.

the Bermudas, the Azores, the Madeiras, Fernando Noronha, Trinidad, St. Helena, Ascension, Tristan d'Acunha, as well as the Falklands, Marion Crozet, the Kerguelens, the Mascarenes, St. Paul, Amsterdam, and even the large islands of New Zealand. Some traditional, and even historical, recollections of primitive movements are well known to be in possession of the Chinese; and these concern all the other great ethnic divisions of central, eastern and northern Asia. The Japanese and Malays also possess remote traditions. These all point, as we shall see, to a more restricted geographical range of mankind in very early times. Many facts indicate the progressive dispersion of mankind from some central region. We may therefore seek, on scientific grounds, for the dwelling-place of the first beings who could be pronounced human.

I shall not occupy space to enter into the details of the evidence; but the nature of the evidence ought, perhaps, to be briefly pointed out. (1) We have the direction of known movements of migration over the earth. These, it is true, concern chiefly the nations of the Mediterranean race; though to a considerable extent, also, tribes and peoples of the Mongoloid and even the African stocks. Most of the movements of the White and Brown races have been from central and southern Asia. The chief exceptions will appear in the sequel. (2) A large proportion of the animals and plants (except forest growths) which have become useful to man, are known to have had their origin in the Orient. Of 770 species of plants used by man for food, 565 come from the eastern and 204 from the western hemisphere. Of the 237 amylaceous, or starch-yielding plants, 191

originated in the Old World and 45 in the New.* (3) Man, as an animal, is unclothed and possessed of a delicate skin. All naked land-animals are natives of warm countries; and, indeed, they must be to endure ordinary climatic vicissitudes. Man, similarly, it may confidently be argued, made his advent in a region where the elements did not oppose his coming. *Primitively he was a tropical animal*, and only wandered into colder zones as he had learned to protect himself by artificial coverings. (4) The mammalian fauna of the *oriental* world is highest and most approximated to the type of man; and on the principle of consistence of chorographic and organic correlations, it should be inferred that man is not only a tropical, but an oriental animal. The four great continental regions, as has been often remarked, present a graduated succession in the rank of their mammalian faunas. Australia is Marsupial and lowest. South America is Edentate, and next in rank. North America, with its Herbivorous fauna, stands third. The Orient — Eurasia — with its carnivorous mammals, stands highest. Palæontology informs us that a similar faunal gradation of these quarters of the world had been established in Tertiary time. The Orient was long highest in rank; and now that the event has shown man to have been the destined culmination of organic improvement, it becomes apparent that the Orient was long designated as the appointed birth-place of the human species. This indication can scarcely be mistaken; and it concurs with the other evidences adduced.†

* *United States Patent Office Report*, 1859, p. 299, and especially p. 361.

† This subject has been discussed by Professor James D. Dana, in his *Address before the American Association for the Advancement*

This mode of reasoning, evidently, may be carried still further. The carnivores are not the highest type of mammals below man, the anthropoid apes, standing next to man, ought to afford more conclusive and more precise indications than the most abundant carnivorous fauna. Where are the Primates next below man found most abundantly at the present time? For the purpose of answering this question, I have compiled the table on the next page.* In the first column is designated the highest order of mammals, with the two sub-orders and eight families comprised in it, arranged in the order of rank. In the succeeding columns are indicated the numbers of species of each order, sub-order and family known to exist in each of the Zoological regions named at the top. These regions may be defined in a general way as follows: The *Palæarctic Region* embraces all Europe, all Asia, except Hindustan, the Malay peninsula and southern Arabia, and includes Africa as far as the Tropic of Cancer. The *Ethiopian Region* embraces all Africa south of the Tropic of Cancer, and includes Madagascar and the neighboring Malagasy islands. The *Oriental Region* embraces the southern peninsulas of Asia and the Malay archipelago. The *Australian Region* embraces Australia, Austro-Malasia, Polynesia and New Zealand. The *Neo-Tropical Region* embraces all South America, the Antilles, and Mexico as far as the Tropic of Cancer. The *Nearctic Region* embraces all North America north of the tropic.

of Science, 1855, p. 33, et seq. See also the present writer's *Reconciliation of Science and Religion*, p. 370; and Peschel, *Das Ausland*, Jahrgang 1869; Caspari, *Urgeschichte der Menschheit*, I Bd., 2 Buch, 5, *Die Wiege des Menschengeschlechts und die Rassenausbreitung*, Vol. I, pp. 182–219.

* From Wallace, *Geographical Distribution of Animals.*

DISTRIBUTION OF PRIMATES AND CARNIVORES.

	Palæarctic.	Ethiopian.	Oriental.	Australian.	Neotropical.	Nearctic.
Primates	5	104	66	3	114	0
Anthropoids	5	54	61	2		
Apes (Simiidæ)		2	10			
Old World Monkeys (*Semnopithecidæ*)	1	11	28			
Baboons and Macaques (*Cercopithecidæ*)	4	42	23	2		
American Monkeys (*Cebidæ*)					81	
Marmosets (*Hapalidæ*)					33	
Lemuroids		50	5			
Lemurs (*Lemuridæ*)		49	4			
Tarsiers (*Tarsiidæ*)			1	1		
Aye-Ayes (*Cheiromyidæ*)		1				
Carnivores (Only the terrestrial)	65	90	95	0	48	43

Here the Palæarctic, Ethiopian and Oriental regions embrace what I designated above, the Oriental continent. Each of these three regions, however, contains, as the table shows, at least fifty per cent. more carnivorous mammals than either of the other regions, and it still appears that the Old World presents a fauna most harmonized with the superiority of man, and stands signalized as the appointed cradle of mankind. More precisely, southern and southeastern Asia bear the strongest characteristics of this kind; though Africa stands conspicuously related to this Oriental region in the dominance of carnivores.

But searching more particularly for the distribution of the Primates, we find that South America and Mexico afford 114 species, Ethiopia 104, and the Oriental region 66.* Primates in general, therefore, give slight precedence to South America; but when

* Murray has given a map showing the preponderance of monkeys by means of a dark belt, including equatorial America on the west, and stretching in a band about twenty degrees wide, across Africa, and thence to Farther India and Borneo.

we analyze the order, we observe that the American Primates occupy the lowest position, while the Ethiopian and Oriental Primates are higher. In these two regions, also, occur the only apes known in the world. These facts still point out the Ethiopian and Oriental regions (in the stricter sense) as best fitted for the reception of the human animal.

It is suggestive that the honors should be divided between Africa and southeastern Asia. These regions, thus united in honors, may be only the extremities of an ancient continent now largely wasted, whose surface was the grand theater of the earliest activities of man. That continent would have been located in the Indian ocean, and would have included the Malagasy archipelago (Madagascar and contiguous islands), and would have stretched northeastward to the Malay peninsula.

Now, this happens to be a conclusion already reached, on more general zoölogical and geological grounds. M. Milne-Edwards, some years ago,* suggested that an extensive area, which he designated the "Mascarene continent," had disappeared from a region situated southeast of Africa. More recently Mr. Sclater, an eminent English ornithologist, has given the name Lemuria to a supposed obliterated land including the Mascarene continent of Milne-Edwards, and stretching across the Indian ocean to Ceylon and Sumatra, and including the Laccadives and Maldives. There are indications that the Lemuroid Primates were developed within this region. Representative species occur at the now detached extremities, and Lemurs are unknown in other regions. Many other forms which occur in the Malagasy islands reappear, or their close representatives reappear, in the Malay region. Among these are several genera of

* Milne-Edwards, in *Comtes Rendus*, 15th April 1872, pp. 1030–34.

birds. Beccari, in a recent work on the geographical distribution of palms,* after describing the difficulties of the dispersion of their fruits, reaches the conclusion that when we find two congeneric species of palms or other plants upon widely separated lands, it is reasonable to infer that such lands were once united. On the Mascarene islands, in Ceylon, the Nicobars, at Singapore, on the Moluccas, New Guinea, in Australia and Polynesia, occur various species of *Phychosperma*, all very difficult of dissemination. In this case, as in so many others, the indications of botanical distribution harmonize with those of zoölogical distribution. "In order to explain," he says, "the presence of closely related palm-forms in localities so separated, we must assume the former existence of obliterated lands in the very region where the Indian ocean, with its storms and tempests, is to-day exclusive monarch — exactly in the region where we must locate the hypothetical Lemuria, in order to explain the otherwise incomprehensible facts of the geographical distribution of animals." For such reasons, it is considered probable that these distant regions were once united.† Now, when we examine the soundings of

* O. Beccari, *Malesia, Raccolta di Osservazioni botaniche intorno alle piante dell arcipelago Indomalese e Papuano*, Genua, 1878.

† Wallace, *Geographical Distribution of Animals*, Vol. I, pp. 76, 276, 285–92, 328, 335. See also pp. 357–9, and *The Malay Archipelago;* Peschel, *Races of Man*, p. 32; Haeckel, *Natürliche Schöpfungsgeschichte*, 4th ed., pp. 321, 619; R. Owen, *Proceedings Geographical Society*, London, 1862; Murray, *Geographical Distribution of Mammals*, pp. 68–71; Hooker, *Flora of Australia*, 1859, "Introductory Essay," p. lv.

This continent, as Peschel suggests, would correspond with the Indian Ethiopia of Claudius Ptolemæus. It occupies, moreover, nearly the position assigned by numerous ecclesiastical writers to the Scriptural Paradise. See Lactantius, *Instit. Divinæ*, ii, 13; Bede, *De Mundi Constit.*, p. 326; Hrabanus Maurus, *De Universo;* Kos-

the Indian ocean, we find, correspondingly, that the graduations in depth are entirely consonant with the hypothesis of a primitive but now wasted continent.* Lemuria lies in the region indicated by the facts of geographical distribution of Carnivores and higher Primates, as the quarter of the world reserved for the first appearance of the human being. It is now generally admitted that man's birthplace was in a region covered at present by the waters of the Indian ocean.†

The general position of the hypothetical continent of Lemuria will be understood from the "Chart of Progressive Dispersions." On this chart the blue

mas Indicopleustes: *χριστιανικὴ τοπογραφία*, tom. ii., p. 188. Ed. Montfaucon (in *Collectio nova Patrum Græcorum*, Paris, 1707), and the anonymous geographer of Ravenna in *Geogr.*, lib. i, cap. 6. So Columbus, when he discovered a land supposed to occupy a position southeast of the Ganges, thought himself in "proximity to the earthly Paradise." According to a passage in the Bagaveda Gita, Adima and Héva were created in Ceylon. (Jacolliot, *The Bible in India*, pp. 195–9.) For my own part, I do not look for Paradise, the Eden of *our* race, in the region populated by the sooty and prognathous types of primitive humanity, but in the more northern region which received the Adamites.

* Consult the "Chart of Progressive Dispersions" at the end of this work. On this subject Mr. Andrew Murray employs the following language: "We may safely infer that a great continent stretched across between Africa and India. The numerous shoals in the Indian Ocean are one indication of this; but a much more important one is the fact of the fauna of India and Africa, belonging, with few exceptions, to the same families which are peculiar to those two districts. So far as regards mammals, abundant illustrations in support of this will be found throughout the following pages, *passim*." (Murray, *Geographical Distribution of Mammals*, p. 29.)

† North of the "Lemurian" continent, the greater part of India was, during Tertiary time, covered by the sea. I shall venture the opinion that it was in Tertiary time that the primitive representatives of humanity were upon the earth. See chapter xxvii.

color is used exclusively for water-lines and geographical indications. The dotted blue lines follow the soundings of fifteen thousand feet; and from their disposition it will at once be understood what regions are most likely to be the sites of obliterated lands. Thus the western half and all the northern and eastern portions of the Indian ocean lie on the landward side of the line of fifteen thousand feet. From southeastern Asia shallow soundings extend beyond Australia and New Zealand. They also occupy large areas in the tropical Pacific. Lines of shallower soundings show that the marine contour lines of one thousand feet pass between Celebes and New Guinea, joining to the Asiatic continent all the islands lying to the northwest, and leaving united with the Australian continent all the islands lying to the southeast as far as the Louisiade archipelago. These lines are thought to indicate ancient land areas. Other land areas are supposed to have existed in the Polynesian region, and to have stretched nearly or quite to the region now occupied by South America. A similar belt of islands and shoals stretches toward North America. On the other side of South America a land connection (not here indicated) is thought likely to have existed in early Tertiary times with western Africa, and to have afforded the means of communication for African types between Africa and South America. It is known that in Tertiary times a great sea or ocean stretched from the southeastern peninsula of Asia over much of Hindustan, Arabia, all western Asia, and most of southern Europe, covering the basin of the present Mediterranean, but not connecting with the Atlantic ocean. It connected, perhaps, with the Pacific on the east. These and other past conditions in the distribution of land and water

have been profoundly discussed by Wallace * and others. Caspari † has given a chart of ancient lands, in connection with an attempt to indicate the early distribution of mankind. There is little difficulty, on geological grounds, in mapping areas which were covered by the sea and areas which were probably continental, in each successive period of geological history; but it is extremely difficult to determine that the shores of land and sea were thus and so at the time when man began to spread himself over the earth. For these reasons, I have not thought it best to attempt to represent precisely any ancient continental configurations. The former probable conditions of continental boundaries and connections it is indispensable, however, to keep in mind, in any attempt to trace the slow progress of racial divergence and dispersion into the regions of the earth now inhabited by man.

II. DISPERSION OF THE BLACK RACES.

Though it is probable that beings properly human existed who were even inferior to the Australians, we may begin with the Australians. These, as before stated, constitute the lowest surviving racial type, and in all probability represent a primordial divergence from the primitive human stock. This turned eastward, while a corresponding primordial divergence turned westward. In other words, one was destined to afford populations to Africa, and the other to Australian, Malayan and Asiatic regions. On the

* Alfred R. Wallace, *The Geographical Distribution of Animals*, 2 vols., Am. ed., New York, 1876. Also *The Malay Archipelago.*

† Otto Caspari, *Die Urgeschichte der Menschheit, mit Rücksicht auf die natürliche Entwickelung des frühesten Geisteslebens*, 2 Bde., Leipzig, 1873.

chart, which is intended especially to illustrate this and the three following chapters, I have employed *continuous* lines to denote ascertained movements of human populations. These are of three different colors, according to the dominant color of the race, as explained on pages 52 and 53. A *broken* line denotes an ethnic trail which has subsequently become covered by the sea, or by other layers of population, or else is, for other reasons, merely conjectural. Arrows indicate the direction of the movement. Where a name is written, the contiguous arrow denotes the stem to which the name appertains. To distinguish the different races of one color, I have employed plain, wavy, crenulated and beaded lines; and the same method is employed for discriminating the different families of the White race.

The eastward stem must have extended the Australian type to the farther extremity of Lemuria, which was among the Sunda islands. If there existed no land communication at that time with Australia, the water passage from Timor was quite practicable, if, indeed, this island was not then a part of Australia. Thus, I think, Australia became overspread with the Australian type. Australians, of course, remained distributed continuously westward to the original seat of the stock in Lemuria, but the subsequent disappearance of Lemurian land has broken all connection between Australia and the ancient home of the Australians. I have therefore represented the hypothetical course of Australian migration by a broken line.

It cannot be doubted that the Australian type once extended over many other regions from which it has since been displaced. In addition to the physical resemblances heretofore pointed out, M. Alfred Maury informs us that traces exist of their presence in Hin-

dustan, in a period more remote than its first occupancy by Dravidians. "Mr. Logan," he says, "has caught certain analogies between the Dravidian idioms and the Australian tongues. . . . A profound study of the names of number in all the idioms of the Dravidian family has revealed to him the existence of a primary numerical system purely binary — which is met with again in the Australian languages. . . . The Dravidian idioms have thus chased before them the Australian tongues at a primordial epoch that now loses itself in the night of time."* In accordance with these ideas I have carried the Australian line across the southern part of Hindustan.

Now, as the group of islands known as Melanesia is covered by Papuans, and as the Melanesian region was once annexed to Australia, it appears that the Papuan type developed from the Australian in those remote quarters, and spread itself beyond, even to New Caledonia and Fiji. It is quite possible that an ancient twig of Papuans extended over the Philippines, leaving the Aëta there as a remnant of themselves, and even pushed on northward, by Formosa and the Loochoos, to the Japanese islands, leaving the Aïnos as witnesses of the northward extent of the modified Papuan type. I shall indicate, however, another supposable origin for the Aïnos.

Tasmania was also inhabited by Papuans, but I scarcely think that Australian appendage was reached from Melanesia. It seems more probable that at one time all eastern Australia was in the possession of the Papuan or prepapuan type, as far as Tasmania, and that the Australians, pressing from the northwest and west, drove the Papuans almost completely from Australia, leaving the Tasmanian population an isolated

* Alfred Maury, in Nott and Gliddon's *Indigenous Races*, p. 75–6.

fragment. Such an opinion is corroborated by the presence of Australian or Papuan-like natives with frizzled hair, on the north coast, and in the interior of northern Australia; presenting the phenomenon of an incompletely differentiated type.* The Tasmanians, moreover, were not characteristically Papuan, and some ethnologists have proposed to regard them a distinct race. It is probable they presented a reminiscence of the transition from the Australian type. If we class the Tasmanians with Papuans, their marked divergence from that race must be taken as evidence of the bifurcation of the prepapuan stem at a remote epoch, perhaps before reaching the Australian continent. I have accordingly represented the northern twig as quite disconnected with Australia.

Should we see ground for assuming the Papuans for the lowest and original race, we could regard this race as spread from its Lemurian home over the whole of Australia and Tasmania; then the Australian type, becoming differentiated, displaced the ancestral Papuans from Australia, leaving Tasmania and Melanesia to remain occupied by the primitive stock. On this supposition, too, the tufted-haired Hottentots would be the direct derivatives of the tufted-haired Papuans, and some ethnologists might be better pleased to see these races in genetic juxtaposition. Possibly such a scheme would more nearly represent the succession of events, but it is opposed by the superior character of a large part of the Papuans in comparison with Australians.

In tracing the ramifications of the westward or preafrican stem, much, of course, must be left to conjecture; though we have some good facts on which

* On this commixture see Earl, in *Journal Geographical Society*, London, Vol. XVI, 239.

to base an inductive procedure. In the first place, the Hottentots most resemble Australians in color, in hair and in intellectual traits. They must be, therefore, most closely connected with Australians. The Namaquas are recognized as closely affiliated, and the Bushmen cannot be regarded as diverging from the same stem at a very remote period. Secondly, the Hottentots are known to have moved southward from the eastern equatorial region of the continent. We may, therefore, presume that they reached Africa in the vicinity of the easterly cape. Thirdly, they have been pressed from the north by the Kaffir nation; this nation, therefore, made its appearance on the north of the Hottentots. Fourthly, the whole family of Bantu Negroes is linguistically and physically related to the Kaffirs; hence the Bantus have ramified westward from the prekaffir stock, and represent its early condition, not its present one. Fifthly, the Soudan populations are true Negroes, and hence ramified from the original Negro stem; but their linguistic divergences indicate that they represent a remote divarication. Sixthly, their movements are known to have been toward the west; and this accords with the hypothesis of their origin. Seventhly, the Fulah are ethnically Berberic, and we must connect them with the Berber stem. Eighthly, they are known to have penetrated from northwestern Africa, and this indicates the direction in which their trail must be drawn. Finally, we may feel confidence in connecting the Somali, the Galla and the Danakil with the Himyaritic Arabs; and also in running a line of Semitic Arabs across the Red Sea into the region east of the Nile, and even into the heart of the Saharan oases. A study of the chart will indicate that the lines have been drawn in accordance with these principles. There are several tribes,

however, like the Niam-Niam, the Fans and the Fundi, about which I have felt especial uncertainty; while it is also obvious that many tribes and nations, like the Mandingoes and the Hausa tribes, are so hybridized that a true chart would show them connected with two or more races or stocks.

It seems highly presumable that Africa was occupied by indigenes at so remote a period that the northern, as well as other parts of the continent, must have come into their possession long before the invasions of the Mongoloids or the Hamites by the Isthmus of Suez. Beyond this presumption we have not a ray of information; and I have not felt justified, therefore, in attempting to trace the movements of the Black races of Africa northward beyond the twentieth parallel of latitude.*

* The physical contrasts between the Australians and Negroes naturally suggest the query whether these stocks do not represent two distinct human origins — their genealogical divergence dating back in *prehuman* times. I judge, however, that if their point of divergence were prehuman, the amount of the divergence would be greater than it is. The Hottentots, moreover, are a connecting link next the Australian side, while the Tasmanians, Papuans, Bechuanas, Makololos and other Kaffirs exhibit progressive approximations to the Negro side, and we thus seem to retain reminiscences of an actual passage between Australians and Negroes. I have, therefore, felt considerable confidence in laying down a physical connection between these two ethnic types within the human period.

CHAPTER XXIII.

DISPERSION OF ASIATIC MONGOLOIDS.

FROM the preaustralian trunk diverged, probably in western Lemuria, a sturdy and prolific stem which was destined to cover Asia and the Malayan regions with dense populations, and to send its streams of migration over all the New World. This may be styled the premongoloid stem. It was the great stock from which the straight-haired peoples of all parts of the world have been derived. It represents a marked divergence in ethnic characters, and leads to the inference that a long period elapsed in the progress of the differentiation. Still, so far as we can judge, the dispersive movement had not, as yet, made wide progress. The Euplocam Dravidians are not to be regarded as budded from this stock, but rather directly, and at a later date, from the Euplocam Australians.

The premongoloid stem bifurcated at an early date, as I have conjectured, into eastern and western branches. Neglecting for the present the western, it is apparent that we must conceive the eastern branch as further ramifying, in primitive times, before the current of population had reached central Asia. The result of this was a stream of population setting northeastward toward the mouth of the Amur, and another setting southeastward toward the Malayan peninsulas. The oldest issue of the southeastward stream seems to have been the Malay population and ethnic type. We have no certain information of the advent of the Malays from the northwest; but, as they are distinctly

Mongoloids, and we cannot admit an autochthonous origin, it seems reasonable to trace them backward to a region which is known to be the radiant point of other types of Mongoloids. The date of their divergence was earlier than the development of the fundamental type of languages spoken in central and northern Asia. The Malay language seems to have had an indigenous growth.

From the Malayan region we are able to trace them progressively over the islands of the Pacific. The greatest purity of the type is preserved in the Sunda islands and the peninsula of Malacca. In migrating eastward, they commingled, to some extent, with the Papuans of Melanesia, and hence arose the so-called Micronesian type, which on one geographical border is predominantly Papuan, and on the opposite predominantly Malayan. From Micronesia, tradition and history are able to trace the Malayan strain in its migrations to the Marshall islands; thence to the Mulgraves; thence to the Samoan; thence successively to the Society, Marquesas and Sandwich islands. The eastward migration is known to have extended, probably from the Society islands, as far as Pitcairn and Easter islands. From the Samoan group a colony diverged to the Friendly islands, and at a later date reached New Zealand.*

It is an ethnological surprise of no little interest to find the Malay type as far west as Madagascar. We receive some hint toward a solution of this puz-

* On the purport of traditions and the evidence from language bearing on Polynesian migrations, see F. Müller, *Novara-Expedition, Ethnographie*, pp. 23, 24, 68–70; Dunmore-Lang, *View of the Origin and Migrations of Polynesian Nations;* Quatrefages, *Les Polynésiens et leur Migrations* (Revue de Deux Mondes, Feb. 1864); O. F. Peschel, *Die Wanderungen der Süd-See Völker* (Ausland, 1864, *Races of Man*, pp. 348–52).

zle in learning that the south of Ceylon and the Maldives are also held by Malays. It seems probable that before Lemuria disappeared a westward colony strayed from the primitive seat, as the Papuan type also wandered back to the Andaman islands. We have evidence that the migration was from the Sunda islands, in the fact that the Hovas of Madagascar breed the Indian zebu instead of the native cattle, and manufacture iron by the use of a singular bamboo bellows, which is used nowhere else except in the Malay islands. The chart is constructed in accordance with these views.

The southeastward stream of populations from the Mongoloid radiant point issued, subsequently to the Malayan departure, in a succession of movements into the Malayo-Chinese quarter of Asia. One migration introduced the Peguans, another the Burmese, another the Anamese. These all stand in close linguistic relation. The Thai, or Siamese, represent still another migration, and they stand linguistically somewhat distinct from their neighbors on either hand. Other rills of population flowed from the same center into the sub-Himalayan regions, while the Bodshi of Thibet may be regarded as the residuum. Some representatives of the Thibetan stock seem to have been carried away by the great northeastward stream, to which I shall presently recur, and their posterity are seen in the isolated Sifan of the provinces of Shensi and Sse-tshuen in China.

We must next endeavor to trace the dispersion of the populations constituting what I have designated the great northeastward stream, and in doing this we shall discover the evidences of its real existence.

The Chinese seem to have exemplified the first ethnic and geographic divergence. As the Chinese

language is the most rudimentary of all existing Mongoloid tongues, it is reasonable to assume that the primitive Chinese were located nearest the point of origin of the Asiatic stock. According to Legge's interpretation of the Chinese classics, Yao, with his hordes of primitive Chinese, came from the north, pursuing, along the east side, the valley of the Hwangho river, in the region of its southward course.* This movement, Von Richthofen asserts, is contradicted by all traditions and later histories, as well as by the impracticability of the route indicated. He maintains that, according to the books, the Chinese nationality originated between 36° and 38° north latitude, and 77° and 86° east longitude; that at a later date they had moved north of eastward, along the northern slope of the Kwen-Lun mountains, and settled in a region between 38° and 39° 30′ north, and 95° and 102° 30′ east, along the borders of the Ho-lin-shan river, an upper tributary of the Hwangho; thence they progressed southeastward to the great bend of the river toward the east, and settled on the Wei tributary.† The Khotanese, living in early times near the western border of the Tarym basin, or Desert of Gobi, were closely allied to the Chinese. We thus catch our first glimpses of the Chinese people in a region nearly as far west as Cashgar, but there is no documentary evidence of their passage through the gates of Cashgar. From this seat their national movement has been toward the east.

On the contrary, the peoples of the great Turkish

* "Thus," he says, "the present Shansi was the cradle of the Chinese empire." (Legge, *Shoo-King, Prolegomena*, p. 189.)

† Von Richthofen, *China*, pp. 297, 341. It is asserted by this author that every respectable sinologue dissents from Legge's conclusion.

and Mongolian stems, since the dawn of tradition, have been in progress southwestward and westward. The Uïgurs, the oldest of the Turkish stems, issued from the region of the Orkhov and the Selenga. In progress of time they had extended themselves to the southwest of the Tarym basin; and peoples of Turkish affinities lay scattered all the way through eastern Mongolia, between the older and newer home of the Uïgurs.* The Turkish Kirghis originated, also, in the region of the Selenga, and the space between the mountains Khangai-Tangnu and Sayan. The Turkish Yakuts still linger about the northern cradle of the Turkish family. Soon after the Christian Era the Turks were rulers of central Asia. The Sien-pi, who also came from the east, overspread all the regions held by the Turks, and maintained dominion from 200 A.D. to 400 A.D. They then disappeared; and, during the following century, Turkish tribes, always pouring in from the northeast, resumed supremacy in the same regions, and maintained it for six hundred years. Each one of these tribes, in succession,—Tukin, Hwei-he, Uïgur, Kirghis—comes first from the northeast, and spreads itself over central Asia, and thence through the various mountain passes to the countries of the west.† The Turks now extend from the Amur and Lena, and the upper Yenesei, in broken tribes, as far as the west border of central Asia, and more continuously westward from this border to beyond the Bosphorus, with a "mosaic" of inter-

* Von Richthofen, *China*, p. 49. The conclusions are based on the Chinese books.

† Von Richthofen, *China*, pp. 50, 51, etc. Some investigators think the Turkish stems to have sprung from the Altai, and moved eastward; but this, according to Von Richthofen, is only a fable, since certain information gives the Uïgurs and Kirghis a northeastern origin.

calated Iranians, Semites, Slavs, Mongols and undetermined stocks. The Osmanli are extensively mixed.

As to the primitive Mongol stock, it is first revealed in the northeast, and each ethnic movement has discharged a deluge of Mongols into central Asia, and thence into the countries accessible through the historic passes of the mountains. The Mongol stem rises into view in the beginning of the thirteenth century, in the region of the Selenga. Under Genghis Khan, they stormed west and south, and overran all China, and extended their sway from the Japan Sea to the Danube and the Persian Gulf. Part of the Turks then ruling in central Asia were crushed, part absorbed, and part driven to the Oder and to Hungary. Under Timur, a second Mongolian deluge swept westward over Asia. The Mongols, however, left no permanent settlements beyond the borders of Mongolia, except those now represented by the Hazara and Aimaq, between Cabul and Herat, and the Kalmuks in the valley of the Volga.

The Tungusic stem of Altaians is also known to have dwelt as hunters, in primitive times, in the forests between the Ussuri and the coast of the Japan Sea. Their movement, in later time, has been southward, but only to a limited extent. The Tungusic Khitan, in A.D. 907, displaced the power of the Turks from eastern Mongolia and northern China.

It thus appears probable that these three ethnic stocks — the Turks, the Tunguses and the Mongols — first became differentiated in the region of the valleys of the Amur and the Lena. There is no ground to seek for their national origin farther west or south.

In the successive movements of these Asiatics toward the south and west, the physical characters of

the continent have determined the routes pursued. These have been as follows: (1) From the "Dsungarian Trough," whose position and northwest-southeast trend are indicated by the lakes Zaisan and Uliungur, east of Lake Balkash, down the valley of the Irtysh, and thence to the Urals. (2) Over the Talki chain from the Dsungarian Trough into the valley of the Ili, flowing northwest into Lake Balkash, and from this valley southwestward to the broad basin of the Jaxartes, and thence to the Oxus, and from that to the Iranian Highland. Here this stream divides. One branch goes west into Persia, Mesopotamia and Syria; the other over the pass of Bamian, or Bholan, into India. Of the conquering and destructive hordes under Genghis Khan and his sons, one branch took the northern route, and the other the route south of the Caspian Sea into Syria. Of the hordes under Timur, a portion pursued the latter route, and another portion turned toward India, along the same course pursued some centuries earlier by Yue-tshi, and later by Timur's grandson, Sultan Baber, who seated himself on the throne of Delhi, as Grand Mogul.

Now, it will not be maintained that the innumerable populations which have poured out of northeastern Asia were autochthonous in those regions. Their ancestors had arrived there in earlier times from some other region or regions. It is not supposable that such region was farther north or northeast. It is not supposable that these so-called Altaics arrived across Behring's Straits from America. It only remains to assume that the ancestors of these nations had, at a very remote period, moved toward the east and north. This is exactly the movement progressing among the oldest known people of Asia, at the date when the light of history is first thrown

upon them. I think we may recognize the Chinese migration as showing the set of the primitive ethnic stream. We may, therefore, regard the Chinese as a branch of this primitive stream, and conceive the main current as trending beyond, into the valleys of the Amur and Lena; whence over-population could find most ready relief in a reflex movement along the flanks of the Great Altai and the Khin-Gan mountains, into the great Tarym basin. This hypothesis accords with all our knowledge of the early history of the Malayo-Chinese. They came from the region of Thibet. Their languages are Mongoloid, but quite divergent, a fact which indicates a remote separation from the prechinese stock. The Miao-tse, or primitive inhabitants of China, still lingering in the mountains of the south, using stone implements, and speaking a tongue quite remote from the Chinese, must be regarded as originating after the divergence of the Thibetan twig from the great northeastern branch. From this branch sprang also the Aïnos, and, finally, the Coreans, who were probably the ancestors of the Japanese. The primitive Coreans may be regarded as a distinct offshoot from the great northeastern current, or, perhaps more properly, a rill from the Tungusic branch of this current. In the latter case, we may conceive them as derived directly from the Mandchus.

Max Müller's view of the ethnic movements of the Asiatic Mongoloids, based wholly on linguistic relationships, assumed a general northward and a general southward tendency from a region not far removed from the position of the primitive Chinese on my chart. One of the southward migrations settled on the rivers Meikong, Meinam, Irawaddy and Brahmaputra, and formed the Thaï tribes. A northern migration fol-

lowed the courses of the Amur and Lena, founding the Tungusic tribes. A second southward migration extended as far as the Malay regions. A second northward is supposed to have founded the Mongol tribes, and to have passed westward along the chain of the Altai mountains. A third northward produced the Turkish peoples. A third southward tended toward Thibet and India, and finally overspread the Indian peninsula. These were the ancestors of the Tamuls. This scheme is framed on the assumption that all mankind are Adamites; but the lines of migration, bating the exact order of succession, are not essentially different from those which I have laid down, save that I do not regard Dravidians as descended from a Mongoloid type.

I have, as yet, taken no account of the Ural-Altaics, who are generally regarded as included in the great Altaian family. It is certainly a rational supposition that they represent a European extension of the great reflected current of population setting along the Siberian plains at a time when the climate retained that softened character which must have prevailed when the Hairy Mammoth herded in Siberia. This is the commonly received opinion, and I have reproduced it on the chart. I have been strongly impressed with the conviction, however, that the Ural-Altaic or Finnish family may be traced to another origin. The Finns are known to have receded from central Europe within historic times. They are generally regarded as a relic, like the Basques, of the prehistoric peoples who preceded the Pelasgians and the Kelts in the occupancy of Europe. These prehistoric Mongoloids may have reached central and southern Europe by the Volga route, as so many other immigrants have done. But, as Mongoloid stone-

folk are known to have dwelt, in very early times, in northern Africa, and as the Straits of Gibraltar are generally believed to have been an isthmus, within the human period, I would venture to suggest, as a hypothesis covering all the facts, that the great pre-mongoloid stem gave off a branch, as before stated, which trended westward — the counterpoise of the great northeastern branch — and that the populations of the western branch spread themselves over most of the Asiatic countries which were destined to be afterward populated by the Mediterranean race. It was this people who left Turanian traces throughout all Assyro-Babylonia, Phœnicia and Arabia.* Directed by the configuration of the shores, they streamed through the Isthmus of Suez and occupied the southern border of the Mediterranean, throughout its whole extent. They passed, probably, to the large island of Atlantis then existing west of the "Pillars of Hercules." The Straits of Gibraltar were then as broad an isthmus as Suez,† and these people poured northward into Europe. They found a paradisiacal peninsula south of the Pyrenees, and retained it long as a favorite center of population, founding there an Iberian empire.‡ Meanwhile, however, they pushed on northward of the great Mediterranean ocean, and, before historic times, had spread themselves to all parts of the mainland of Europe and to the contiguous islands. It was now the morning dawn of European history, and the dim light reveals them in the

* See chapter x.

† On the historical evidences of this statement see Humboldt, *Views of Nature*, Sabine's trans., Am. ed., pp. 278–81.

‡ "The Iberians," says Humboldt, "belong to the very oldest stock of European nations." The Basques are a remnant of these; their language, the Euskara, possesses no affinity with any of the surrounding dialects.

rude condition of a people in the Stone Age.* Hamitic tribes now appear on the scene in the southeast, and Aryans followed them over the Ægean, and in another stream, passing north of the Black Sea, spread over Europe. By these Asiatic and superior invaders the Troglodytes were partly destroyed, partly displaced, and partly absorbed. The continued pressure of Aryan populations has crowded the residue of the prehistoric Mongoloids of Europe progressively northward, and the populations of the Finnish stem are all which remains of them.

I must turn back a moment to make further reference to the Mongoloids in Atlantis. There is evidence, both ancient and modern, that a country of considerable extent once lay in a region now mostly covered by the Atlantic ocean, in a position west of the Straits of Gibraltar. This was the "fabled Atlantis." Plato, who lived in the fourth century before Christ, has left on record most of the historical information which we possess on this subject. He cites the authority of a poem composed by Solon, two centuries earlier, in which that distinguished lawgiver pretends to reproduce some records preserved by the Egyptian priests under whom he had studied. He states that beyond the pillars of Hercules existed formerly an island larger than Africa and Asia united. It was the seat of a civilization comparable to that of Egypt. There were cities and palaces and temples. From this island went forth, at a date 9000 years before Solon, a powerful army which asserted control of western Europe, as far as Italy, known in Plato's time as Tyrrhenia, and made unsuccessful war on the Athenians. Another army had conquered all northern

* See chapter x, p. 145, seq.

Africa as far as Egypt. The arms of Egypt gave it a repulse.*

Now, we may believe there is some basis for these accounts, even if we receive the date of 9000 years as meaning only a remote period; and the vast extent assigned to the island as meaning only an island very large compared with those of the Mediterranean. As to the date of the expedition to Egypt, Plato tells us, collaterally, that it took place during the reigns of the Athenian kings Cecrops and Erechtheus. Now Cecrops, according to the "Marble of Paros,"† reigned 1582 [some say 1450] B.C., and Erechtheus, 1409 B.C.

Another version of the story of Atlantis is given by Theopompos, who wrote, also, in the fourth century before Christ. According to him, the information concerning Atlantis was given by Silenus to the ancient king Midas.‡ Substantially, the two accounts agree, save that Theopompos says nothing about the invasion of Egypt. The Gauls possessed, also, traditions on this subject, which were collected by the Roman historian Timagenes, who lived in the first century before Christ. He represents that three distinct

* Plato, *Timæus* and *Critias*, ed. Stallbaum, 1838, t. vii, pp. 99, 389. Jowett's translation of the *Dialogues of Plato*, Vol. II, pp. 462, 519–521, 588, 599, 607. According to the Abbé Brasseur de Bourbourg, the inhabitants of central America retained traditions of a cataclysm which swallowed up a vast country in the region now covered by the Atlantic ocean. For some particulars relating to this tradition see Foster, *Prehistoric Races of the U. S.*, pp. 394–9.

† This, otherwise known as the "Parian Chronicle," was a chronological account of the principal events in Grecian and particularly in Athenian history during a period of 1318 years, from the reign of Cecrops to the archonship of Diagnetus, 264 B.C. (Anthon's *Classical Dictionary*, art. "Paros.")

‡ See Aristotle, cited by Plutarch, *Consolatio ad Apollonium*, § 27, ed. Didot-Dübner, p. 137. Compare Preller, *Griechische Mythologie*, 1st ed., Vol. I, p. 453.

peoples dwelt in Gaul: (1) The indigenous population, which I suppose to be Mongoloids, who had long dwelt in Europe. (2) The invaders from a distant island, which I understand to be Atlantis. (3) The Aryan Gauls.* Marcellus, also, in a work on the Ethiopians, speaks of seven islands lying in the Atlantic ocean near Europe, which we may undoubtedly identify with the Canaries; but he adds that the inhabitants of these islands preserve the memory of a much greater island, Atlantis, which had, for a long time, exercised dominion over the smaller ones.†

Notwithstanding these historical references to an extinct island, Atlantis had been pronounced a myth until recent investigation gave it substance and reality. In 1873 Her Majesty's ship *Challenger* made soundings in the Atlantic ocean, off the coast of North Africa;‡ and in 1874 the German frigate *Gazelle* made further soundings in the same region. In 1877 Commander Gorringe, of the United States sloop *Gettysburg*, discovered, about 150 miles from the Straits of Gibraltar, an immense bed of living pink coral, in 32 fathoms of water. These various series of soundings, when located on a map, indicate the existence of an extensive bank of comparatively shallow water, in the midst of which the Canaries and the Madeiras rise to the surface.§ The location of this newly discovered mountain in the bed of the Atlantic, lies within the fifteen thousand fathom line on the

* The Gaulish recitals of Timagenes have been preserved by Ammianus Marcellinus (lib. xv, c. 9), and may be consulted in Didot-Müller's *Fragmenta Historicorum Græcorum*, III, 323.

† Didot-Müller, *Fragmenta Historicorum Græcorum*, IV, p. 443.

‡ Sir C. Wyville Thomson, *The Voyage of the Challenger*, "The Atlantic," Vol. I, chap. ii, Appendix B, p. 93.

§ See John James Wild, in *Nature*, for March 1, 1877, No. 383, p. 377.

chart at the end of this work, and embraces the Canary and Madeira islands. Here is probably the stump of the ancient Atlantis.* This lost country was first inhabited by the Mongoloids, who, I think, found their way along the south shore of the Mediterranean. It was afterward seized by the Hamitic Berbers, who spread themselves westward from the Nilotic valley in early Egyptian times. During the historic period, the isolated Canaries have stood as the only inhabited remnants of Atlantis, and the detached and degenerate Guanches, when at length rediscovered, complained, "God placed us on these islands and then forsook and forgot us."

The foregoing views, relative to the dispersion of the Asiatic Mongoloids, are represented in greater detail upon the chart of "Dispersion of Mankind."

It remains to trace the prolongation of the Mongoloid stock of peoples into North and South America.

* A "Miocene Atlantis," so styled, has been inferred by Unger and Goeppert, on the basis of the extinct floras of Europe and America; and this idea has been more fully elaborated by Heer and others. Leidy, Marsh and Cope have found, in the remains of extinct mammals of North America, similar indications of an ancient connection. This appears to have existed as late as Pliocene time; but it would be hazardous to affirm that it continued into human times, unless it can be shown that man had a preglacial existence. (See Oswald Heer, *Flora Tertiaria Helvetica*, Winterthur, 1855–59; G. de Saporta, in *Annales des Sciences Naturelles*, 1862, and *Le Monde des Plantes avant l'apparition de l'Homme*, 1878; Unger *Die Versunkene Insel Atlantis*, Wien, 1860.)

CHAPTER XXIV.

DISPERSION OF THE AMERICAN MONGOLOIDS.

AMERICAN ethnology is beset with perplexities which have baffled the best skill of investigators. Thanks, however, to the energy of a limited number of practical workers in the American field, we may reasonably hope to soon find ourselves advanced beyond the stage of guesses and speculations in which we have rested so long.*

Science has but lately settled on the ethnic relation of the American indigenes. Following Blumenbach, popular opinion long admitted them as a distinct American or "copper-colored" race. It was soon manifest, however, that the Eskimo are profoundly distinct from the wild tribes of North America.† Retzius, as we

* By act of Congress, Maj. J. W. Powell is placed in charge of a department of American ethnology. He is to have the full coöperation of the Smithsonian Institution, which has long been gathering the materials for final investigations. Prof. W. H. Dall has succeeded in bringing before the public an important body of facts concerning the natives of Alaska and contiguous regions. Mr. Stephen Powers has reported numerous interesting observations on the California Indians, where Gibbs, in the field of linguistics, had preceded him. Mr. H. H. Bancroft has given the public a rich thesaurus of facts touching the Indians of the Pacific coast, and Hon. L. H. Morgan has brought out a masterly discussion of the social and political institutions of the natives of America. Were less recent contributions to American ethnology to be cited, it would be necessary to mention the names of Gallatin, Schoolcraft, Catlin, Stephens, Catherwood, Squier, Daniel Wilson, Davis, Prescott, Kingsboro, Humboldt, del Rio, Orozco y Berra, Pimentel, Brasseur de Bourbourg, and a series of older, marvel-loving Spanish chroniclers.

† See especially Morton, *Crania Americana.*

have seen, drew a dividing line through the continental populations, and discriminated *dolichocephali* and *brachycephali*. Finally, it has been agreed that all Americans are fundamentally Mongoloid.

Respecting the origin of the American peoples, the diversity of opinion is almost ludicrous.* Polygenists have been ready to regard them as autochthonous. This view was most ably defended by L. Agassiz and J. C. Nott.† It is maintained by D. F. von Hellwald,‡ who sharply denies the dispersion of mankind from some original abode in central Asia. Hon. L. H. Morgan regards the valley of the Columbia river in Oregon as the primitive Eden of America, the "seed-land of the Ganowanian family,"§ and he leaves the impression that he considers them autochthonous. Galindo transferred the primitive residence of the human race to America. Very recently Dr.

* See, besides works cited beyond, Hugo Grotius, *Dissertatio de origine gentium Americanarum*, Amstelodami, 1642; Jean de Laet, *Notæ ad diss. H. Grotii de orig. gent. Americ.*, 1643; Jean de Laet, *Responsio ad H. Grotii diss. de orig. gent. Americ.*, 1644; Poisson, *Animadversiones in originem Peruvianorum et Mexicanorum*, Parisiis, 1644; Gottfried Wagner, *De originibus Americanis Dissertatio*, Lipsiæ, 1669; And. Rocha, *Tratado unico y singulare del origen de los Indios occidentales del Perú, Mexico, Santa Fé y Chile*, Lima, 1681; Engel, *Essai sur cette question: comment l'Amérique ast-elle été peuplée d'hommes et d'animaux?* Amsterdam, 1767; *Philosophische Untersuchungen über die Amerikaner*, Berlin, 1769; Vater, *Untersuchungen über Amerika's Bevölkerung aus dem alten Continent*, Leipzig, 1810; McCulloch, *Researches philosophical and antiquarian, concerning the aboriginal history of America*, Baltimore, 1829; Josiah Priest, *American Antiquities*, Albany, 1834. See further, Hornius, cited p. 386.

† See especially Agassiz' Essay in Nott and Gliddon's *Types of Mankind*.

‡ Hellwald, *The American Migration*, in Smiths. Ann. Rep., 1866, p. 328.

§ Morgan, *North American Review*, No. cix, p. 407; *Ancient Society*, pp. 108–110.

Rudolf Falb is reported to have announced * the discovery that the relation of the Quichua and Aymara languages to the Aryan and Semitic tongues is such as to justify the opinion that the primitive seat of the human species was either in Peru or Bolivia. Of those who hold to the population of America by immigration, some maintain that the American Indians are descendants of Jews; † some, that they are the posterity of the "lost tribes" of Israel. ‡ The extraordinary opinion has been advanced by Dr. Dominick M'Causland, that the Hyksos or "shepherds" driven from Egypt found their way to America. § A more popular, because more plausible, opinion traces the entire population of America across Behring's Straits. It was a suggestion of E. G. Squier that it had arrived from Polynesia; while Dr. Daniel Wilson has recog-

* In the *Neue Freie Presse*, of Vienna. I have not seen the original paper.

† Thom. Thorowgood, *Jews in America, or probabilities that the Americans are of that race*, London, 1650.

‡ Hon. Elias Boudinot, *A Star in the West*,— an ingenious and persuasive discussion, the result of immense study.

§ "The Hyksos made frequent efforts to recover their lost dominion; but failing in their attempts, there is cogent and persuasive evidence that they passed eastward to the Euphrates valley, through India and Cochin China to the western shores of the American continent, and became the builders of those stupendous structures in that country whose origin is wrapped in mystery, but on which we can identify the Mesopotamian style of architecture, and trace popular habits and customs similar to those depicted on the Egyptian monuments." (M'Causland, *Adam and the Adamite*, pp. 226–7). The subject is more fully discussed in the same author's work, *The Builders of Babel*, pp. 84–101. The whole hypothesis seems to be destitute of any valid support. The supposed movement across Asia is nearly transverse to the natural pathways, and to the courses pursued by other ethnic movements; and the facts to which appeal is made are clearly traceable to other explanations. Besides, the pyramids and other "monuments" of Egypt were not produced by the Hyksos.

nized the probability that one portion arrived from Polynesia and another from the northwest.*

The origin of the Mexican and Peruvian civilizations has been the subject of endless speculations. It has been a favorite conjecture that the highly maritime Phœnicians carried their enterprises to the New World.† Alexander von Humboldt many times recorded his conviction that there had been an ancient intercourse between western America and eastern Asia.‡

* "From some one of the early centers of South American population, planted on the Pacific coast by Polynesian and other migrations, the predominant southern race diffused itself" northward beyond the Isthmus, expanded throughout the peninsula of Central America, and ultimately spread over a large part of North America. "But independent of all real or hypothetical ramifications from southern or insular offsets of oceanic migration, some analogies confirm the probability of a portion of the North American stock having entered the continent from Asia by Behring's Straits, or Aleutian islands, and more probably by the latter than the former, for it is the climate that constitutes the real barrier." (Daniel Wilson, *Prehistoric Man*, pp. 595, 597).

† Georgius Hornius, *De originibus Americanis Libri Quatuor*, Hagæ, 1652, see pp. 19, 20, 92, 94, where Horn affirms three grand Phœnician emigrations to America. M. Paul Gaffarel, who has recently made a résumé of the evidences on this subject, concludes thus: "Without affirming anything, as yet, we admit, then, that the Phœnicians discovered a vast island beyond the pillars of Hercules, many days' sail from the continent; that they made numerous voyages, and that they jealously preserved exclusive possession, with a view to removing thence in case of necessity, themselves and their families, as the Dutch at one time contemplated removing to Batavia, when the armies of Louis XIV were menacing Amsterdam. (Gaffarel, *Les Phéniciens en Amérique*; read before the Congrès International des Américanistes, at Nancy, 1875. On this subject see also Landa, *Relation des choses du Yucatan*, trans. Brasseur de Bourbourg; Ordonez, *Historia de la creacion del cielo y de la tierra*; Cabrera, *Description of the ruins of an ancient city, discovered near Palenque.*)

‡ Humboldt, *Ueber Steppen und Wüsten*; *Vues des Cordillères, et monumens des peuples indigènes de l'Amérique*, Paris, 1816, Vol. II; *Ansichten der Natur*, Stuttgart, 1859, I, 151, Am. ed., p. 144–7; *Cosmos*, Otté's trans., Am. ed., II, 236, note.

Some of the northern antiquarians have advanced the opinion that the Norsemen planted first in North America the seeds of European civilization, and some have maintained that, even at an earlier date, the Irish Kelts had settled in America.* Catlin thought he detected evidences among the Tuscaroras of a mixed Welsh descent.† Indications of Oriental connections have quite recently been based on the remains of ceramic art found in the countries of the Pacific coast. This has been remarked in reference to the pottery of the Pueblos,‡ as well as that of the Santa Barbara Indians of California.§ I can personally testify that a study of ancient Peruvian pottery has constantly reminded me of forms with which we are familiar in Egyptian archæology. Finally, a French traveler, Charnay, who has explored the east and west portions of Java, claims to have discovered a close affinity between the remains of the civilization introduced by Hindu Buddhists, and that of ancient Mexico.‖ The weight of opinion, after all, tends to

* Humboldt, *Relation Historique*, tom. III, 1825, 9th Book; Hakluyt, *Voyages and Navigations*, Vol. III, p. 4.

† Catlin, *Letters and Notes on the manners, customs and conditions of the North American Indians*, 1841, Vol. I, p. 207; II, pp. 259 and 262-5; Humboldt, *Cosmos*, II, 236.

‡ Barber, "A comparison of the Pueblo pottery, with Egyptian and Grecian Ceramics," in *American Antiquarian*, Vol. I, No. 2, p. 61, July, 1878.

§ I take the liberty to cite from a private letter, of December 30, 1878, received from Dr. Stephen Bowers, of Santa Barbara, who states that he is preparing a memoir on the "Santa Barbara stock of Indians." He continues: "I have found specimens identical with all the stone implements figured by Dr. Schliemann, in his *Mycœnæ*, etc., over which he expresses surprise; and General Cesnola informs me that the specimens I have found in the graves in this portion of California remind him of some obtained in the tombs of Cyprus."

‖ *Popular Science Monthly*, July, 1879, p. 432.

regard the American civilizations as indigenous, and this view seems most consonant with the general tenor of the evidences. Common characteristics of remote and independent civilizations must be expected to germinate from the common nature of man.

The ethnological data by which we may be legitimately guided in searching for a knowledge of the ethnic movements of American populations are, briefly, the following: In the first place, we have the widely extended Eskimo and Aleut groups of tribes, united by Dall in the great Orarian family, fringing the shores of the Arctic Ocean and Baffin's Bay. We have a series of physically and socially related tribes extending along the Pacific slope of the continent to the Gulf of California, and, as I fully believe, as far as central America and Peru, and even to Patagonia. These affiliations have been set forth in a preceding chapter. These consanguineous peoples must all have proceeded from one ethnographical origin. It is not from the south, for we find there an abrupt ethnic discontinuity. On the north, however, we note an absolute continuity with the northeastern Asiatics.

While these coastwise tribes present a degree of homogeneity so marked, we observe everywhere, but especially in North America, a physical, moral and intellectual differentiation from another type of natives, the Hunting Indians, whom I have designated Vagantes.

In the next place, we are in possession of some pretty definite knowledge concerning the actual movements of the American peoples. These movements, as in other countries, have been generally in the direction of the longitudinal dimension of the continent. It is the opinion of Dr. Rink that the Eskimo once lived in the interior of North America, and that they have been pressed northward and north-

westward, and even across Behring's Straits by the hardier and more powerful hunting tribes.* It is a matter of record that the Eskimo have occupied regions much farther south than at present. The Kopag-mut, now confined to the border of the Frozen Ocean, formerly extended two hundred miles up the M'Kenzie river, but have been driven out by the Indians.† At the beginning of the last century, according to Charlevoix, Eskimo were occasionally seen in Newfoundland. About 1000 A.D. they lived somewhat farther south on the Atlantic coast. According to the Icelandic sagas, Lief and Bjorn founded a colony in a region now Rhode Island, where they encountered some dwarfish natives whom they called skrælings.‡ Certainly the stately Algonquins, whom the first white settlers met in New England, could not be described by Icelanders as *dwarfish;* and we have in the facts ground for the belief that much of North America was once occupied by the Eskimo race, and that they have been driven out by the warlike Hunting Indians. The opinion of Dr. Rink is accepted and extended by Professor Dall, who has spent several years in Alaska.§ "My own impression," he says, "agrees with that of Dr. Rink, that the Innuit were once inhabitants of the interior of America; that they

* Cited by Dall from *Arctic Papers*, published in 1875 by the Geographical Society of London, and also from *Tales of the Eskimo*, by Dr. Rink.

† Dall, in Powell's *Contributions*, Vol. I, p. 10.

‡ Torfæus, *Vinlandia Antiqua*, Hafn, 1705; *Antiquitates Americanæ* Copenhagen, 1837; Humboldt, *Cosmos*, Vol. II, p. 233, Sabine's trans., 1848.

§ Dall, in Powell's *Contributions*, I, p. 102. Mr. C. Markham's address on the *Origin and Migrations of the Greenland Eskimo* I have not seen. It was delivered before the Geographical Society of London, Feb. 27, 1865.

were forced to the west and north by the pressure of tribes of Indians from the south; that they spread into the Aleutian region and northwest coast generally, and possibly simultaneously to the north; . . . that they finally peopled Greenland and the shores of northeastern Siberia." Their first appearance in Greenland, after the middle of the fourteenth century,* is a fact and date in accordance with this general movement from the interior of America. Furthermore, many of the tribes of Washington and Oregon have been in motion westward. Dr. George Gibbs conjectures that "the Tahkali and Selish families, with perhaps the Shoshoni and some others, originated east of the Rocky Mountains; that the country between that chain and the Great Lakes has been a center from which population has diverged."† The first two families above mentioned belong to the west-coast stock, and it is thought by Buschmann, that the Shoshoni are their near kindred. Nearer the coast the movements of migration have, in some instances, been southward. The Tsinuks have traditions of a northern origin. Dr. Gibbs names several tribes which are known to have moved southward. The Shoshoni themselves have been driven in that direction, as well as westward.

The Mexican nations had traditions of southward movements which are still more articulate. They are represented as proceeding from a distant country toward the northeast, named Aztlan. This may have been no more remote than Texas and New Mexico. By some

* Conrad Maurer, in *Der Zweiten Deutschen Nordpolarfahr*, I, 234, Leipzig, 1873; David Cranz, *Historie von Grönland*, Vol. I, p. 333.

† Dr. Geo. Gibbs, in Powell's *Contributions*, Vol. I, p. 224. This is similar to the opinion of Hellwald, but Mr. Morgan has expressed the conviction that migration was *away from* the Pacific coast.

it is thought to have been located in the middle valley of the Mississippi and the lower Ohio, while others suppose it to have lain in the vast prairie region,* or even as far north as the basin of the Great Lakes.† Before the arrival in Anahuac of the founders of the Aztecan state, several other migrations had taken place from the same region and the same stock of people. These seem to have been slow and quiet movements, strongly contrasting with those brief and turbulent tribes of warlike hordes in Asia and Europe which brought subjugation and destruction successively over China, India, Tartary and Rome. It was more like those Asiatic movements located in the very twilight of tradition, in which we see the Chinese, and the forefathers of the Tunguses and Turks, slowly extending themselves northeastward across the great Tarym basin toward the Japanese Sea,—a progress more like the movement of a glacier or the growth of a tree than the migration of a people. These were movements, perhaps, like that of population from our own Atlantic coast toward the Mississippi valley, but characterized by a lower degree of vigor and a slower rate.

First, if we may follow the faintest evidences, were the movements of the great Nahoa family,‡ which introduced into Mexico, before the Christian Era, the so-called Toltecatl civilization. They displaced the tribes already in possession who, though somewhat distinct in dialects, bore a fundamental resemblance to the Toltecatl stock. Among these older tribes were the Olmecs, the Otomi, remarkable for their monosyllabic (or

*Humboldt, *Vues des Cordillères*, in many places.

†Von Hellwald, *Smithsonian Ann. Rep.* 1866, 355.

‡Abbé Brasseur de Bourbourg, *Histoire des Nations civilisées du Mexique et de l'Amérique Centrale*, Paris, 1857–59, Vol. I. The volume is abundant in information respecting the Nahoas.

Asiatic?) speech, the Totonacs, the Mixtecs, the Tarascs and the Zapotecs. Two general routes seem to have been pursued by the Nahuatl emigrants. One was on the east of the Rocky Mountain ranges, along the valley of the Mississippi to the Gulf, and thence over the lowland border through Tamaulipas and San Leon, toward the Mexican table-land. The other route lay on the west of the Rock Mountains, and pursued a broad path over the great plateau regions through Colorado, New Mexico and Arizona to the Rio Gila, and thence through Chihuahua, Durango and Zacatecas, to the lake of Chapala. A third seems to have lain nearer the Pacific coast, from Sinaloa to Nicaragua.

Early in the seventh century the Toltecs* arrived from the same general direction. They moved, apparently, over the three converging routes just indicated; but there is no evidence that the movements were simultaneous. The whole migration probably extended over some centuries. The monarchy which they established fell to pieces about 1018, and a remnant of the Toltec people sought a refuge in Guatemala and Nicaragua. The Chichimecs, who, from time immemorial, had hung on their northern borders, now assumed occupation on the site of the vanished Toltecan state. The Chichimecs were a fierce and warlike people, and spoke a language foreign to the Nahoa stock. I venture the conjecture that they, and some other alien tribes of Mexico, belonged to a divarication of the stock of Hunting Indians.

Soon began the invasion of the group of tribes known as Nahuatlacs. The seventh and last of these was the celebrated Aztecs, who arrived after a considerable interval. From the Aztec annals we learn that

*Orozco y Berra, *Geografia de las Lenguas y Carta ethnografica de Mexico*, Mexico, 1865.

they issued from Aztlan in 1090. In 1091 they were at Quahuitl-Icacan. Thence, by successive stages, during a series of years, like those by which we trace the Asiatic Aryans from their northern home, we are able to mark the progress of the Aztecs from the mysterious Aztlan to the paradise of Anahuac on the table-land of Mexico, a hundred years after their departure from their northern abode. The Israelites wandered forty years in the wilderness before reaching the promised land; the Aztecs, a century. Here the Aztecs reared that civilization which excited the wonder and the cupidity of the Spaniards.

The Aztecs had succeeded the Chichimecs, who seemed to have retired to the country from which they came, on the northwestern border of Anahuac. The Chichimecs had succeeded the Toltecs who, on their part, had continued southward into Guatemala and Nicaragua. The Toltecs had succeeded the Nahoas, who had also moved southward into the same countries. In Guatemala, Nicaragua and Yucatan are the architectural remains of a remarkable civilization, not surpassed by that of the Aztecs.* It remains a disputed question whether these amazing monuments are the comparatively late work of the Toltecs or of their probable predecessors, the Nahoas, or are rather to be attributed to a people who dwelt in these countries at a still remoter period. The latter conclusion seems to be the best sustained. But in any event, the general character of these central Ameri-

* E. G. Squier, *Niacaragua, its People, Scenery, Monuments*, New York, 1852, 2 vols.; *Notes on Central America*, 1855; "Archæology and Ethnography of Nicaragua," *Trans. Am. Ethnograph. Soc.*, Vol. III, 1852; Francourt, *History of Yucatan, from its discovery to the close of the 17th century*, London; J. L. Stephens, *Incidents of Travel in Central America, Chiapas and Yucatan*, New York, 1840, 2 vols., 12th ed., 1853.

can remains is such that few will deny an ethnic connection more or less remote between the people of the Palencan civilization and those of the table-land of Mexico. This implies southward migrations as far as Yucatan and Guatemala.

Still greater is our uncertainty respecting the ethnic connections of the ancient inhabitants of Costa Rica, Chiriqui and Panama. In Chiriqui we begin to discover traits of relationship with Peru;* but as Hellwald observes, "a doubt can scarcely exist" that the countries of the Isthmus were reached by the migrations from Anahuac. We detect faint indications of actual communication between North and South America. Proceeding to the highlands of New Grenada, we find the home of the ancient and modern Chibcha, or Muysca, stretching as far as Cundinamarca and Bogotá.† These people possess some myths which clearly remind us of the Toltecs. Farther south, in the highlands of Quito, are faint traces of an early actual migration. Here the Cara people, who established the monarchy of Quitu, are reported to have come "from over the sea." The epoch of the monarchy is said to fall between 700 and 800 A.D., and continued till 1487, when it was conquered by the Incas and annexed to Peru.

Distinct evidences of migrations reappear in Peru. On the rise of the Inca dominion, the Aymaras had been in possession from a mythical antiquity. Many of the monuments of Peru pertain to this older people. The sepulchral mounds are theirs; the gorgeous

* King Merritt, "Report on the huacas or ancient graveyards of Chiriqui," *Proc. Eth. Soc.*, New York, 1860.

† Joaquin Acosta, *Compendio historico del discubrimiento y colonizacion de la Nueva Grenada*, Paris, 1848; Ezequiel Uriocoechea, *Monumenta Chibcharum.*

temple of Pachacamac, the Creator of the earth, was theirs; the extensive structures near Tiahuanuco, on lake Titicaca, were theirs, and perhaps also the ruins of the ancient Caxamarquilla. These people retreated before the Incas, toward the southwest and south. In the fifteenth century they were driven as far as Chile.* The Incas themselves had very probably a northern origin. Their civilization presents so many points of resemblance with that of the Toltecs, that we are constrained to regard them as near relatives, if indeed they were not the Toltecs themselves, reappearing in due time, after the decay of their empire in Mexico. This is the conclusion of that sagacious observer and almost inspired generalizer, Alexander von Humboldt, and this view is entertained by Von Hellwald, and, as I judge, by ethnologists generally.

Through Chile and Patagonia we discover no marks of actual migration. The only indications of connection with Peru and more northern countries are the physical correspondences of race, and some burial customs, before referred to. Neither do we discover in the regions east of the Andes the proofs of ethnic or tribal movements, which clearly tend to connect the inhabitants of these countries with the race-family or the civilization which spread over the highlands and plains of the west. There are faint indications, however, that some feeble rays of Peruvian civilization reached southern Brazil, and that the populations of some parts of eastern South America are descended from two ethnic stocks, while the tribes of the Amazonas valley represent exclusively the older and more uncultured people.

It results from the evidences in our possession

* Prescott, *History of the Conquest of Peru*, New York, 1847; Desjardines, *Le Pérou avant la conquête espagnole*, Paris, 1858.

that there has existed a continuous and general tendency of migration from north to south in the two Americas. South of the isthmus the movement is restricted to the Andean and sub-Andean belt along the Pacific; north of the Isthmus it occupied the whole breadth of the continent as far as the latitude of New Orleans; and beyond that it is traceable as far as the Great Lakes, from the valley of the Ohio to California. Still further north, the intracontinental movements, if they ever existed, are overlaid and obscured by the wanderings of the Hunting Indians, who have long held possession. Yet west of the Cascade ranges we still discern faint reminiscences of tribal movements conformable to the general tendency of this stock of the American population. The Eskimo, however, as already stated, have for centuries been in progress of retreat northward, probably from the latitude of Rhode Island. There must consequently have been an earlier time when they moved southward from the gate of entrance upon the territory of America.

So far as we have learned anything of the social relation of the two families of North American natives, it has been one of hostility, in which the Hunting Indians have continually encroached upon the more peaceful occidental tribes. In many cases we are informed that the movements of the latter have been caused by the encroachments of the former. The Tinneh have at a few points penetrated quite to the Pacific coast. The facts of observation show a population of wild savages pressing continually northward and westward. Projecting these movements backward a few centuries, we can readily descry the fierce warriors of the Tinneh, the Iroquois and the Algonkins invading the continent from the southeast. The only

passage in that direction to regions more remote is by Florida and the arch of the lesser Antilles. Florida is easily accessible from these islands. At the same time the Caribs actually spread from the West Indies to the coast of South America. There are no facts in our possession forbidding the hypothesis of a current of slow migration from the western or southwestern shore of South America toward the mouths of the Amazons and the Orinoco; and this is a hypothesis which it seems to me best explains the body of facts which I have passed in review. The ethnic affinities of these northward-moving tribes with the populations of Oceanica and of the southward-moving tribes with people of northeastern Asia I have already traced; and it only remains now to consider the physical practicability of communication with America over the two routes indicated, the one by Behring's Straits and the other by Polynesia.

The fundamental identity of race between the natives of America and the Mongoloids of the Old World points toward an Asiatic origin of American populations. Prof. W. H. Dall, who regards the Innuit or Eskimo stock as of American origin, with more of a tendency to migration toward Asia than in the opposite direction, nevertheless admits: "It may be as well to premise that in the far and distant past, a period so ancient as to be wholly without the scope of this paper, it seems probable that the first population of America was derived from the west. . . . I see no reason for disputing the hypothesis that America was peopled from Asia originally, and that there were successive waves of emigration."*

If we admit it as highly probable that the New

*W. H. Dall, in Powell's *Contributions to American Ethnology*, Vol. I, p. 95.

World was populated by Mongoloids from the Old, the next question is in reference to the point or points of communication between the two. Now, save the prehistoric Mongoloids, who once occupied Europe, and the torpid Finnish tribes of the present day, we are not certain of the existence of Mongoloids in the Old World anywhere except along the shores and islands of the Pacific ocean. It is scarcely supposable that the prehistoric Mongoloids of Europe found their way to America across the Atlantic ocean — unless geographical conditions were very different from the present, — a point to which I have already adverted. On the other hand, it is certain that from the time when the eastern shores of Asia received their populations, easy access to America has existed. The former presence of the Hairy Mammoth on both sides of Behring's Straits is a strong indication that a land-connection formerly existed. But without the aid of this hypothesis, intercommunication by the straits is not extraordinarily difficult. The headlands of America are visible from the Asiatic side. The straits are frozen over and passable every winter. The animal species on opposite sides are identical. In summer, Eskimo boatmen very frequently make the passage from one side to the other, for commercial purposes. Indeed, there is a tribe of Eskimo, the Okee-og-mut, occupying the islands in the straits, who subsist as commercial traders, and regularly conduct the traffic between the Asiatic and American shores. From St. Lawrence island, south of the straits, they exchange commodities with Plover Bay, on the west, and St. Michael's and Kotzebue Sound, on the east. From this island, the nearest land on the Asiatic side is 50 statute miles distant; on the American side it is 120 statute miles. The width of the straits is commonly stated at 36 to 39

geographical miles, which is equivalent to about 45 statute miles. It is certain, therefore, that this is one thoroughfare, over which Asia has transmitted populations to America.

There is another northern connection possible, and that is from Kamtchatka, the Kurile islands or Japan, by the Aleutian islands, to America. From Attu, the westernmost of the Aleutians, to the nearest cape of Kamtchatka, is said to be 491 statute miles. The Commander's islands, however, break this interval. Miedna island is but 130 miles from Kamtchatka, and Behring's but 235 statute miles from Attu. These distances, over a boisterous sea, are regarded by Professor Dall as impracticable to the rude navigators of primitive times; and he denies, with emphasis, the plausibility of the theory of emigration by the Aleutian route.* But I cannot reject it with equal assurance. It appears that such ocean spaces have been crossed. They have been crossed in high northern latitudes, and they have been crossed by voyagers who have founded populations. There are the Pribiloff islands, which, Professor Dall informs us, are inhabited by Aleuts. Now, as Aleuts occupy also the islands named after them, population must have passed in one direction or the other. But the Pribiloff islands are 220 statute miles from the nearest Aleutians. They are an equal distance from the Eskimo island of Nunivak. They lie in the midst of Behring's sea, "which is almost perpetually covered by fog." Such facts lessen the improbability of migration from Kamtchatka to the Aleutians. But if the channel of 491 miles is passable, it is easy to admit that seafarers from the Kurile islands, or even from the shores of Japan, may have planted colonies upon the Aleutians;

* Dall, in Powell's *Contributions*, I, 95, 96.

since the Kuro Siwo, which flows northward on the Asiatic side, would, of itself, carry adventurers from the Kurile or Japanese waters, both northward and eastward, and render access from the more southern regions as practicable as from Kamtchatka. The fact that neither branch of this current actually strikes the Aleutians is not a conclusive negative, since both the northward and the eastward branches pass within a practicable distance of the most western Aleutians. We should bear in mind, also, the length of voyages made by the Polynesian islanders. Indeed, most articulate traditions exist, as already stated, of the successive occupation of these island groups by adventurers originally from the Malay archipelago. These movements were opposed by the great ocean currents and the prevailing monsoons, and at each step covered several hundred miles. To Easter island from Pitcairn is about 700 statute miles; from the Friendly to the Society islands, at least 1100 miles; from Tahiti to the Marquesas, 600; from the Tonga islands to New Zealand, 1300, and from the Marquesas to the Sandwich islands, 1600 miles. I think it proper, therefore, to keep in view the possibility that Mongoloids may have passed from Asia to America by way of the Aleutian islands.*

There are excellent reasons, I believe, for considering the practicability of a Polynesian connection. From Easter island the distance to the Galapagos is 2000 miles, which is only 400 miles, or one quarter, more than the Kanaks are known to have traveled, and still travel, upon voyages of commerce or adventure. From the Galapagos to America the distance

* For several instructive examples of the passage of hundreds of miles in the open sea in small boats, see Lyell, *Principles of Geology*, 8th ed., pp. 638–40.

is not over 600 miles. But there are good grounds to infer that in the primitive periods of humanity the pathway across the South Pacific was less interrupted. Caspari has given us a chart of the "conjectural conformation of the land during early post-tertiary time,* in which a great expanse of land stretches from the Marquesas islands nearly to the coast of South America. In the North Pacific, also, are located tracts of land which would render the passage from Asia to Mexico exceedingly practicable. The chain of islands marking the location of this connection is very conspicuous (see Chart). He even intimates that this is the course pursued by the ancestors of the Nahuatl nations. I am not aware that the evidences of soundings suggest, independently, any such daring attempts at the restoration of lost lands, but it has been long known that the existing flora of South America, Fuegia and the Falkland islands points to Polynesian and remoter connections. Dr. J. D. Hooker has discussed this subject on the basis of a wide induction. In his "Flora of New Zealand," especially† after citing the phenomena of geographical distribution, and showing the high improbability — in the case of some species the *impossibility* — of a transmission by ocean currents, winds or other supposable agencies, he concludes that "it is necessary to assume that there was, at one time, a land communication [with New Zealand] by which the Chilian plants were interchanged; that at the same, or another epoch, the Australian; at a third, the Antarctic, and at a fourth, the Pacific floras, were added to the assemblage. It is not necessary to suppose that for this interchange there was a

* Otto Caspari, *Die Urgeschichte der Menschheit*, etc., Leipzig, 1873, Vol. I, Chart, and pp. 191, etc.

† See also his *Flora Antarctica*, pp. 210 and 368.

continuous connection between any two of these localities, for an intermediate land, peopled with some or all of the plants common to both, may have existed between New Zealand and Chili, when neither of these countries was yet above the water." His final conclusion, in reference to New Zealand (including Auckland and Campbell's islands), Australia (including Tasmania) and extra-tropical South America (including the Falkland islands), is, "that the floras of these regions exhibit a botanical relationship as strong as that which prevails throughout the lands within the Arctic north temperate zones, and which is not to be accounted for by any theory of transport or variation; but which is agreeable to the hypothesis of all being members of a once more extensive flora, which has been broken up by geological and climatic causes." As specimens of the facts on which this generalization is based, I may here state that 89 New Zealand species of phenogamous plants, or nearly one-eighth of the whole, are South American, and 50 species, or nearly one-sixteenth of the whole, occur also in Fuegia and the Antarctic islands.*

Beccari, whom I have before quoted as a recent authority on the meaning of kindred organic forms surviving on widely separated land areas, employs the distribution of palms to prove the obliteration of connecting land between South Africa and South America. We have, he says, one species of *Raphia*

* Hooker, *Flora of New Zealand*, Vol. I; Introductory Essay, in *Botany of the Antarctic Voyage of H.M. Discovery-ships Erebus and Terror, 1839–43*. This essay is copiously reviewed in *American Journal Science and Arts* [2], Vol. XVII, pp. 241 and 334, March and May, 1854. The general subject is resumed by Dr. Hooker, in *Flora of Tasmania;* Introductory Essay, "On the Origination and Distribution of Species," cited very fully in *American Journal Science and Arts* [2] xxix, pp. 1 and 305, January and May, 1860.

along the Amazons, five on the west coast of Africa, and a seventh on Madagascar. As the fruits of these palms possess no ready means for distribution, it is necessary to assume that the physical relations of these regions were once very different from the present.*

Such generalizations based on organic phenomena are fully sanctioned by the general tenor of geological history. The appearance and disappearance of land-areas have served to punctuate the progress of terrestrial events.† But the past conditions of the Polynesian region are elucidated by facts of a somewhat special character. Charles Darwin and Professor James D. Dana almost simultaneously brought to light the evidences of extensive and long-continued vertical oscillations among the coral islands of the South Pacific.‡ On this subject, the following language is employed by Mr. Andrew Murray: "It is now universally admitted that these coral islets are the relics of a submerged land which had formerly existed as a great continent; and the relations of the faunas and floras of South America to New Zealand and Australia on the one hand, and to Africa on the other, as well as some relations between south-west Australia and south Africa, almost compel us to

* O. Beccari, *Malesia*. See also *Kosmos*, III Jahrg. 1879, Apr., p. 55. For earlier suggestions on this subject see Schouw, *Grundzüge einer allgemeinen Pflanzengeographie*, Berlin, 1823; De Candolle, *Géographie Botanique*, Paris and Geneva, 1855.

† If, according to Professor Croll's speculations, the southern hemisphere is at present in a state of secular glaciation, its lands are abnormally depressed; while, on the contrary, during glaciation of the northern hemisphere, the land of the southern hemisphere must have been abnormally elevated in respect to the sea-level. See Croll, *Climate and Time*.

‡ Darwin, *Journal of a Naturalist;* Dana, *Geology of Wilkes' Exploring Expedition* and *Corals and Coral Islands*.

admit that as complete a circlet of land formerly crowned the southern temperate regions as now does the northern." * It only remains to establish the persistence of this continental connection into human times, to discover the requisite facilities for racial intercommunication between Polynesia and South America. This is thought probable by so good an authority as Prof. Daniel Wilson, already cited on this subject.

The theory of immigration to America and of ethnic movements on American soil flows necessarily from the facts and considerations thus presented. The great northeastward current of population setting from the neighborhood of the primitive seat of the Chinese people toward the valleys of the Amur and Lena, while giving off successively the branches which have become Mantchu, Turkish, Altaic and Mongol stems, prolonged itself with diminished force into the farther peninsula of Asia. Either by means of a land connection or across the strait, and probably, also, by the Aleutians, these hyperborean tribes found their way to America. Eastward they streamed over the greater part of North America as far, probably, as the Carolinas, and at a later period in another direction to Greenland. The stream of populations was split by the Alaskan mountains into two currents. The coastwise current I do not feel disposed to trace farther south than the peninsula of California. The inland current, in addition to the Eskimo dispersion just mentioned, flowed in a powerful stream southward along the lake-bearing zone of the continent from the valley of M'Kenzie's river to Lake Superior. The traces of copper-mining industry remaining in that region attest their occupancy. This was on the borders of the

* Andrew Murray, *The Geographical Distribution of Mammals*, London, 1866, 4to, p. 25.

mysterious Aztlan. Within the country of Aztlan these people spread themselves over the region characterized by the presence of mounds and earthworks throughout the northwest. Meantime successive migrations, or rather developments of population, extended this people southwestward over the plateaux of Colorado, Arizona and New Mexico. Now were built the celebrated cliff-houses so interestingly described by Holmes, Jackson and others; now were reared "the seven cities of Cibola."* The remarkable Pueblos of the southwest are the relics of the ancient population.

Wave following wave swept onward. The beginning of this flow is lost in the obscurity of the past. The Nahoas moved forward in due succession. The Toltecs followed and crowded the Nahoas through the Isthmus of Tehuantepec into Yucatan and central America. The Aztecs followed the Toltecs in occupancy. While the Aztecs crowded on the Toltecs, these pushed farther the Nahoas, and the Nahoas pressed on the rear of their unknown and mysterious predecessors. The front of the stream spread at length over the highlands of Cundinamarca. The Aymaras pioneered to the borders of Titicaca. The Incas sprang up in their rear, and while they absorbed the kingdom of Quitu on one hand they dispelled the fugitive Aymaras on the other to the borders of Chile.

Meantime another type of Mongoloids had strayed to the shores of South America by the Polynesian communication. Few at first, they were unable to force a passage northward along the western slopes of the Andes, already occupied. They filed through the passes of the mountains into the plains of the Gran

*See an interesting critical account of the "Seven Cities of Cibola," by L. H. Morgan, in *North American Review*, No. CVIII, April 1869, pp. 457–498, with numerous literary references.

Chaco and the pampas of the La Plata. The lowlands and borders of broad rivers suited the hereditary instincts of the posterity of islanders. In due time all South America eastward of the Andes fell into their possession. The vast tide of the Amazonas and its annual sea-like overflow nourished a truly maritime population. When they stood on the shores of the Caribbean they dared embark upon its waves. Island invited them from island. They reached the Greater Antilles. They rested on the Tortugas. They invaded the peninsula of Florida, and another continent was open before them. Spreading northward and westward, they pressed the older occupants from their presence. The white man arrived and found these movements of population in progress, and the only changes which have taken place during the last four centuries have been entirely in conformity with the tenor of events which I have thus delineated.

CHAPTER XXV.

DISPERSION OF THE DRAVIDIANS AND MEDITERRANEANS.

WE turn now to the method of dispersion of the second of the Brown races, known in recent times as Dravidians or Dravida. Sustaining pronounced affinities with both Mongoloids and Australians, as shown in chapter xix, they must be regarded as a branch divaricating from the Australian trunk while yet Lemuria existed. Its course in relation to that of the premongoloids is largely a matter of conjecture. Its historical status, however, shows that it sought the regions lying toward the north. It participated in the movement of the consanguineous Mongoloids. On such a presumption I depict it as tending rather toward the mouths of the Indus than toward Ceylon and the Dekhan. On one hand it became dispersed over much of the region between the Indus and the Caspian, and on the other it passed into the Indian Punjab. From the Punjab it appears that one branch followed the valley of the Ganges to its delta, and another moved southward. In due time the whole of Hindustan was overrun by this race, and we have no evidence of any earlier occupation. It reached Ceylon, and in comparatively modern times developed there a voluminous literature. It is more than probable that the Ceylonic legend of Adima and Héva originated with this race. The later invading Brahmans could not have located the Eden of mankind in a country of which they knew nothing.

On the theory of the postmongoloid origin of the Adamites, it is time to look for the ancestral stock of Adam. The preadamite peoples who seem to have been in the vicinity of the Mesopotamian region about this time were the Dravidians, and, perhaps, the troglodytic Mongoloids. The Turkish nations, themselves strongly approximated, in their modern aspects, to the Mediterranean race, had certainly not reached these regions, and had not, probably, assumed their present ethnic aspects, in the age of the early Adamites. Otherwise, we might be tempted to suppose that Adam had sprung from the Osmanli, or Uzbek or Turcoman stock. With our present view of the facts, it seems more reasonable, as before shown, to regard the early Adamites as a specialized ramification of the northern Dravidians.* Adam, of the Hebrews, was probably the ancestor to whom, with more or less of myth, they traced their national genealogy. This is all that Adam, as a proper name, signifies. I have little doubt that Adam had fellow-countrymen, in small number, who closely resembled himself; but their posterity were destroyed by the great deluge which visited that region, or they remain undistinguishable from modern Dravidians. The deluge of Hebrew tradition was not separated from the advent of Adam by an interval sufficiently long to permit antediluvian Adamites to become very widely dispersed. The center of the Noachic dispersion, as on general grounds we may believe, was but a few hundred miles from the "Garden of Eden." Aside, therefore, from the probability that the non-Noachic Adamites were exterminated by the Flood, it seems useless to seek for traces of Adamites as distinct from the Noachites. For us, at this distance, the dispersion of the Noachites is the disper-

*See chapter xix.

sion of the Adamites. This subject has already been discussed on both biblical and scientific grounds, in the third, fourth and fifth chapters of the present work; and nothing further remains to be said.*

It may be appropriate, however, to note some divergent views respecting the unity of the ethnic assemblage commonly denominated Mediterranean. The scheme of human dispersions set forth in the present work implies the reality of a single original center of humanity; and a lineally connected center of dispersion for each of the principal types of mankind, so situated as to be embraced in the general scheme of dispersion, at the same time that it fulfills the requirements of all known facts connected with the history of the several races. Aside from the theory of multiple origin of mankind, it is not in the least surprising that some modern ethnologists have assumed positions totally incompatible with the scheme

* In the present discussion of the question of Preadamites, I have not been required to examine the correctness of the popular interpretation of Genesis which views the three so-called "sons" of Noah as somewhat contemporaneous. The inquiry must ultimately be made, nevertheless, whether the Genesiacal *brotherhood* is one of common parents, or, rather, of common descent from the Noachite ancestor. The Bible indicates Ham as the oldest "brother," and Japheth as the youngest; and archæology has shown (see chapter iii) that Hamitic empires preceded Semitic, as Semitic empires preceded Japhetic. It is possible that many centuries intervened respectively between Ham, Shem and Japheth. Connected with this inquiry is the closer physical approximation of Hamites to Dravidians and Mongoloids, manifest in their deeper color, their inferior hairiness, and less developed secondary sexual characters generally; in all which particulars the Japhetites are more differentiated, in accordance with their later emergence into view. The affinity of the Hamitic Accadian language, moreover, with the Mongolo-Dravidian, was such that by Rawlinson and others it was once ranked as Turanian; while no Turanian affinities of Japhetic languages have ever arrested particular attention.

here proposed, and with every scheme which attempts to trace types of men, and the human species at large, to their respective centers of dispersion. It has been maintained that movements of migration have passed from Europe into Asia, instead of the converse direction. The traditional belief in the Asiatic origin of the modern Europeans seems first to have been attacked by Adam Czarnotski, who wrote between 1813 and 1825.* He maintained that the Slavs were a primitive population of Europe. This opinion was reaffirmed by Laurenz Surovietski in 1822, and by Lelewel in 1830. About the same time it was assumed by H. Schulz that the cradle of the Indo-Germanic stock was in western Europe, and that a tide of emigration has extended thence into Asia.† Omalius d'Halloy strenuously asserted the European origin of the Aryan languages, and, by consequence, of the Aryan family.‡ Latham, more recently, has argued for the European origin of Aryan languages and peoples, on the ground that the less numerous must have been derived from the more numerous,—a very inconclusive argument, certainly. Beufey thinks the Indo-Germanic family is a distinct race, developed not far from the Caspian Sea. Fligier fixes on southwest Germany for the primitive home of the Aryans.§ Theodor Poesche is confident that the primitive seat of this family was upon the

* According to Casimir Delamarre, in *Bulletin de la Société de Géographie*, June, 1870.

† H. Schulz, *Zur Urgeschichte des Deutschen Volksstammes*, Hamm, 1826.

‡ Omalius d'Halloy, "Lecture sur la prétendue origine des Européens," in *Bulletin de la Société d'Anthropologie de Paris*, tom. vi, pp. 237–246.

§ Fligier, in *Mittheilungen der Wiener Anthropologischen Gesellschaft*, VI, 8, 9.

plains of northern Europe, between the Baltic and the Black Sea.* In my own judgment, however, though some ground must exist for each of these divergent opinions, the weight of probability rests most decidedly with the theory of the central Asiatic origin of the Mediterranean race, and also of the Aryan family. The indications on which contrary opinions have been based, so far as I learn, are simply the reflex movements of tribes and nations repulsed from Europe by hostile neighbors. Such were the early movements of the Kelts from Iberia to Gaul and northern Italy, and afterward to Asia Minor; and the retreat of the Kalmucks, in 1771, from the valley of the Volga, in the direction of the ancient seat of the Mongol family. But in such cases we either have actual knowledge of earlier westward movements, or else good historic and ethnological data on which to base an inference to that effect.

* Theodor Poesche, *Die Arier, Ein Beitrag zur historischen Anthropologie*, pp. 64, 66. He finds "in the Dnieper the mighty nurse of the oldest Aryans," p. 72.

CHAPTER XXVI.

CONDITION OF PRIMITIVE MAN.

THE conception of man as an educable and improvable being implies a primitive man destitute of all the material and cultural results of intellectual and disciplinary activity. The conception of primitive man in the possession of all the natural endowments of the Mediterranean race of the present, is a denial of the capacity of man to improve, and an implication that all the effort and discipline and knowledge of thousands of years have failed to increase, to any extent, man's natural power of accomplishment. As long as it was supposed that the remote ancestors of the Hebrew family were the primitive population of the world there was good reason to maintain that primitive man was equal to the White man of the present. He was the White man. But, now that we feel confident of a long line of remoter and pre-adamic ancestors, we discover that Nature's principle of ceaseless improvement has had scope of time and space sufficient for application in the human career; and we feel a sensible relief in knowing that we are not shut up to a cast-iron condition, but may hope for boundless improvement.

To assert that man has advanced from the lowest human condition, is not to assert that this condition was reached by advance from the brute. It is not necessary to assert this; and I wish the reader to note distinctly that none of the conclusions of this work rest on the assumption of man's derivation from a

brute ancestor. Man may or may not have had such an origin; I do not trouble myself or the reader with that question. But as all theories, "orthodox" and "heterodox," hold to a blood relationship among the races; and as plain facts, in spite of theories, show that a gradation exists among the races, and that the normal movement of organic succession is from lower to higher, I know of no method of avoiding the conclusion that the condition of primitive man (not Adam) is represented by the condition of the lowest race of modern times. I do not say the lowest and most stupid and driveling human condition existing; for individuals, and even whole tribes, have been crushed to the status of extreme stolidity and distress. I think the wild Australian of the interior is probably quite as good as the first representatives of humanity.

The Troglodytes of Europe have been fallaciously represented as examples of primitive humanity. They belong to a race older than Adam; and perhaps reached Europe before the advent of Adam; and they represented, undoubtedly, a low condition of human intelligence, and more especially of culture. Yet they were quite superior to modern Australians; and we must believe them at least equally superior to their own remote progenitors. As they have sometimes been represented as half-brutes, connecting man with apes, it may be well to summarize here the inductive conclusions which display them as fully men.

Physically, the men of the Palæolithic* Epoch, judging from the few skulls and skeletons discovered in Belgium and England, were of rather short stature, and of a Mongoloid type, like modern Finns and Lapps. Anatomical comparisons confirm the conclusion of Grimm, based on linguistic researches. In

*For explanation of this and correlated terms see p. 167.

the Reindeer Epoch, the remains of southern Europe indicate men nearly six feet in stature; but the men of Belgium were still small and round-headed, and such they continued to be to the end of the Stone Age. The Neolithic men of the Swiss lakes were much like the modern Swiss; but this is not sufficient proof that they were the ancestors of the Swiss.

The Palæolithic men do not seem to have been characterized by any marked inferiority of type; yet a jaw-bone found at Naulette, has several marks of inferiority, being somewhat thick, and small in height, and having molar teeth increasing in size backward, the wisdom-teeth being largest instead of smallest, and having, moreover, five fangs instead of two. The chin, also, is deficient in prominence. The famous Neanderthal skull, also, has a low forehead and prominent brow-ridges, but the cranial capacity was seventy-five cubic inches (12 29 cubic centimeters) — about that of the lowest living races, and "in no sense," as Huxley says, "to be regarded as the remains of a human being intermediate between man and the apes." The Engis skull exhibits no special marks of inferiority. The Cro-Magnon skull of the Reindeer Epoch had a capacity of 97 cubic inches (15 90 cubic centimeters), which is above the mean of the Mediterranean race. There was considerable prominence of the jaws, but the chin was projecting and presented a strong contrast with the Naulette jaw. The tibia was much flattened (platycnemic), as in many other primitive types, though it is worthy of inquiry whether this is not a general Mongoloid character. The Neolithic Borreby skull belonged to the type of Neanderthal.

Socially and *intellectually*, palæolithic man, in the regions in question, seems to have existed in a most

primitive condition. Dwelling in wild caverns,* he hunted the beasts with the rudest stone implements, and clothed himself in their skins. We find no evidence of the use of fire, though probably known; and there are some indications that he made food of his own species. Few attempts at pottery have been discovered, and in these the product was rude, hand-made, and simply sun-dried. In the Reindeer Epoch, fire was in general use, and it was employed in baking, though imperfectly, a better style of hand-made pottery, and in cooking food employed in funereal and, quite possibly, cannibalistic feasts. Many pieces of highly ornamented reindeer's horn, pierced with one, two or three holes, discovered in Perigord, are regarded as staves of authority, either civic or priestly. Here also occur numerous phalangeal bones of the deer, so pierced with a hole as to serve for whistles. Bone and reindeer's horn were wrought into barbed harpoons and arrow-heads.

In the Neolithic Epoch, cereals were cultivated and ground into flour for cakes; cloth was formed for clothing, and bone combs for the hair; stores of fruit were preserved for winter's use; garden tools were fashioned from stag's horn; log canoes were employed in navigation; planks and timbers of oak were made by splitting tree-trunks with stone wedges; log cabins were constructed on piles, or on artificial islands; fortifications were employed in war; fish-nets, well made from flaxen cords, have been dredged at

* It is a necessary supposition that man, in the primitive state, sought such shelter as Nature had provided beforehand. Peschel says: "In the legends of the Mexicans and the inhabitants of the Antilles, living beings are supposed to have first proceeded from caves; and caves play a similar part in the legends of creation current among the Tehueltecs." (Peschel, *Races of Man*, p. 408.)

Robenhausen, and the abundant débris of numerous flint workshops, implying a degree of division of labor, have been discovered at Grand-Pressigny and other places in Belgium and France. As to intelligence and mental dexterity, a surprising amount is developed in the working of flint implements, especially in the north of Europe.

Aesthetically, palæolithic man had advanced no farther than the use of necklaces formed of natural beads, consisting of fossil foraminifera from the chalk. Some flints from the river-drift of St. Acheul present rough sketches which, it has been conjectured, may have been prompted by the artistic feeling. Some of them bear remote resemblances to the human head, in profile, three-quarter view, and full face; also to animals, such as the rhinoceros and mammoth. If the cavern of Massat is palæolithic, it affords us the most ancient known successful attempt at portraiture; for M. Fontan found there a stone on which was graven a wonderfully expressive outline of the cave-bear.

In the Reindeer Epoch the taste for personal adornment had become considerably developed. They manufactured necklaces, bracelets and pendants, piercing for these purposes both shells and teeth, and the bony part of the ear of the horse. Amber, also, came into use. The æsthetic feeling was specially developed in the south. Some of the curious pieces of reindeer's horn, supposed to be staves of authority, are handsomely enchased. A considerable number of remarkable illustrations of primeval art of the Reindeer Epoch have become known to archæology. They consist of sculptures and of carvings on slate, ivory, horn and bone. Among the latter is the entire outline of the mammoth etched upon his own ivory. The Neolithic Epoch seems to have been marked by a decline in the

artistic feeling. The ornamentation of the pottery is more elaborate, and the finish of the stone and bone implements more symmetrical and neat; but we discover few relics of carving and engraving.

Religiously, there is little to be affirmed or inferred of the palæolithic tribes. Some of the curiously wrought flints may have served as religious emblems, and occasional discovery of deposits of food near the body of the dead may very naturally be regarded as evidence of a belief in the future life. In the Reindeer Epoch this class of evidences becomes very greatly augmented, as shown in the systematic and carefully provided burials in some of the tumulus-dolmens, and in the traces of funeral repasts in these and the rock-shelters of Aurignac, Bruniquel and Furfooz. The numerous specimens of bright and shining minerals found about many settlements — as of hydrated oxyd of iron, carbonate of copper and fluor-spar — may have been used as amulets, and thus testify to the vague sense of the supernatural which characterizes the infancy of human society. The neolithic people add to such indications the erection of megalithic structures, some of which, surrounded by their cemeteries, as at Abury, in England, must naturally be considered as their sacred temples.

Prehistoric man, in brief, and not less the most ancient Stone Folk than the people of the Iron Age, represented, in Europe, the infancy of his species. All his powers were undeveloped. Every evidence sustains us in the conclusion that he was not inferior in psychic endowments to the average man of the highest races; but he was lacking in acquired skill, and in the results of experience accumulated through a long series of generations, and preserved from forgetfulness by the blessings of a written language.

The European society of which I have thus given a résumé,* belonged, probably, to a preadamic race; but we are not in a position to affirm that its date was preadamic. However this may be, there is little doubt that its character was more primitive than that of the society organized by the early Adamites. From such indications as the Hebrew records offer us, as well as the superior intelligence of the Adamic race, we may safely conclude that the early Adamites organized a society far in advance of that which I have just sketched. Nevertheless, the early Adamites, according to the biblical accounts, were still in a stage of barbarism. Even the accounts are phrased and colored under the influence of a later culture. At best, the Asiatic antediluvians were wandering hordes of herdsmen. Their religious natures were strongly developed, but were little illuminated by rational conceptions. Even the Abrahamidæ had made but moderate advance. The Egyptians, meantime, had reached the stage of a settled nationality. These disclosures cannot be accounted discrediting to the Hebrews — still less to humanity. We are all descended from rude herdsmen, or bloody warriors and half-clad savages. The fact that we are no longer such, is the rational basis of unlimited hopes of future advance.

* Convenient and accessible compilations of the leading facts may be found in several recent works in the English language, of which I cite: Lubbock, *Prehistoric Times, as Illustrated by Ancient Remains, and the Manners and Customs of Modern Savages*, 3d ed., London, 1872; Lyell, *The Geological Evidences of the Antiquity of Man*, 4th ed., 1873; Carl Vogt, *Lectures on Man, his place in Creation and in the History of the Earth*, trans. and ed. by James Hunt, London, 1864; Figuier, *Primitive Man*, revised trans., New York, 1870; Charles Rau, *Early Man in Europe*, New York, 1876.

CHAPTER XXVII.

ANTIQUITY OF MAN.

ANOTHER question which confronts us, in view of the doctrine of Preadamitism, is the question of the antiquity of man's origin. This question assumes a widely different aspect since we have discovered that the biblical Adam was not the first man, but only the first White man. It does not involve the authority of the Sacred Scriptures to learn that the first *man* may have appeared a hundred thousand years ago. The first White man may have made his advent within the biblical period.

Discussions on the antiquity of man have assumed three different and somewhat successive aspects. (1) It was assumed that the ascertained antiquity of the historical nations would shed light on the antiquity of the first man, supposed to be the biblical Adam. (2) It was assumed that the antiquity of the Stone Folk of Europe remounted to a higher date than that of the ancient nations, and would represent the antiquity of the human species. (3) It now appears that the antiquity of *man* will not be shown by either of these determinations; but that it probably rises vastly beyond the age of the Stone Folk. The way is open, of course, to discuss, on scientific grounds, the antiquity either of Adam, the Stone Folk, or the First Man. I shall offer some observations on each of these points.

I. Epoch of the First Man. To the determination of this very little can be contributed. The ear-

liest men left no records of themselves. The very country in which they lived has been swallowed up by the sea. Their monuments, if they created any, lie in the bottom of the Indian ocean. Their bones, if undissolved, are mingled with the fossil remains which must await another geological convulsion for their discovery and investigation. But the indigenous races of Africa and Australia may have left some record which will shed light on the date of the occupation of those continents. I imagine that in some of the caverns of Abyssinia or central Australia may yet be discovered relics of man which may fix his epoch relatively to some geological event. The research is not a hopeless one. Science stands ready to undertake it; and I doubt not, the records of some geological or anthropological society will one day tell whether man lived in Australia or central Africa as far back as the Miocene age of the world. We must not shrink from the discovery.

II. Epoch of the Stone Folk. When it was fully settled that men had occupied Europe in remote prehistoric times before the last great revolutions in the configuration of the earth's surface, and while yet animals now extinct were roaming in the forests, skulking in the caverns, and swimming in the rivers of the continent, it was too readily assumed that his European antiquity stretched back into preglacial times, or at least reached the figure of tens of thousands of years. This conclusion is unsustained by the historical, archæological and geological evidences. The opinion seems to me wild and fanatical. The obscurity which hangs over the primeval folk of Europe seems to be ascribed by some men to their remoteness. They have no tangible ground for the reckless assumption that the records of the Stone Age date back a hundred thou-

sand years.* Like objects seen in a fog, these events are not so remote as they seem. The latest "pile habitations" come down to the sixth century. In many instances the débris from lacustrine villages have yielded Roman coins and other works of Roman art. Homer's epic was composed but 900 years before our era, and the Stone Folk were then in full possession of central and northern Europe. It is to be noted that the Age of Stone thus descends to within 900 years of our era. History, indeed, declares that among the Lapps and Finns it descended to the time of Cæsar. The civilized Pelasgians entered Greece 1400 years before Homer, and found the Stone Folk there. We have, then, at least twenty-five centuries of historical time for the duration of the Age of Stone. Of its earlier duration, European history, of course, has nothing to testify; but I discover no valid ground whatever for the opinion that the Stone Age in Europe began more than 2500 or 3000 years before Christ.

The grounds on which the opinion of the high antiquity of European man has been based are mostly geological, and I will proceed to state them and expose their untenability.†

1. *Preglacial remains of other animals have been mistaken for human remains.* By preglacial remains are meant such as were deposited previously to the

* Haeckel makes the antiquity of the Stone Folk "in any case more than 20,000 years," and "probably more than 100,000 years," "perhaps many hundred thousand years." Haeckel, *Natürliche Schöpfungsgeschichte*, p. 595.

† The following views and methods of treatment have been employed by the present writer for many years. They were outlined in a "Syllabus of a Course of Lectures on Geology," published in March 1869, and republished in 1870, and again, with amplifications, in January 1875. Mr. James C. Southall, meantime, in the course of his elaborate discussion of the subject, has employed many of the

advent of the continental glaciers in Europe. We have heard it asserted from time to time that man appeared in Europe during the Tertiary Age. The evidence has always been slender, and has never been accepted by cautious investigators. The following are examples of the facts upon which certain revolutionary scientists have relied.

Some bones found at Saint Prest, in France, in stratified sand and gravel, were observed to bear cuts, notches and scratches, which it was supposed had been made by the use of flint implements, and hence by human hands. These bones were associated with *Elephas meridionalis*, an elephant which, from the frequent discovery of its remains, is known to have ranged from the Later Pliocene to the beginning of the Quaternary Age. But it was proved by experiment that very similar markings are produced upon bones by porcupines. Now, in the beds containing the bones in question were abundant remains of a large rodent, quite capable of causing the supposed human markings. To a candid mind, I think it must appear more plausible to refer the markings to a cause known to exist, than to ascribe them to human agency not known to exist at the time and place, and to disregard, in doing so, all our positive evidence as to the epoch of man's European advent.

Again, the shell marls (*faluns*) of Léognan, near Bordeaux, enclose bones of an extinct manatee, and of certain chelonians and cetaceans, which bear marks appearing to have been made by human implements.

facts and inferences in a similar way. See Southall, *The Recent Origin of Man, as illustrated by Geology and the Modern Science of Prehistoric Archæology*, Philadelphia, 1875, 8vo, pp. 606; and *The Epoch of the Mammoth and the Apparition of Man upon the Earth*, Philadelphia, 1878, 12mo, pp. 430.

Certain anthropologists have been enthusiastically confident that such is the case. The manatee in question is known to be of Miocene age; and on the strength of such indications, the announcement of human remains in the middle of Tertiary time has been sounded from France around the world. But in the same deposits occur the remains of a carnivorous fish (*Sargus serratus*) whose serrated teeth fit exactly the markings on the fossil bones. A similar explanation probably awaits the furrowed *Halitherium* bones of Puancé, as well as the notched and scratched bones of a cetacean (*Balænotus*) described from Pliocene deposits by my good friend Professor Capellini.*

Finally, at Thenay, also in France, occur flints in certain lower Miocene limestones which were at first declared to be the works of human hands.† But that opinion is scarcely entertained at present. Bushels of similar flint-chips may be picked up along some of the chalk sea-beaches.

2. *Human Remains erroneously supposed preglacial.* A human skeleton found in volcanic breccia, near the town of Le Puy-en-Velay, in central France, was, for a time, supposed to have been inclosed by the same eruption which buried, in the same neighborhood, the remains of the Pliocene *Elephas meridionalis.*‡

*Capellini, *L'Uomo pliocenico in Toscano*, 1876, abstracted in *Bolletino del R. Comitato Geologico d'Italia*, Vol. VII, p. 345.

†*Congrès International d'Anthropologie et d'Archéologie préhistoriques*, 1867, p. 67.

‡So good an anthropologist as Topinard still maintains the Pliocene age of these remains. Further, he recognizes human shell-heaps of late Miocene age at Pouancé, and affirms that man's existence in the lower Miocene Epoch "is a clearly revealed scientific fact." (Topinard, *Anthropology*, p. 436.) So Caspari also continues to associate these human remains with the "Miocene" mammoth. (Caspari, *Urgeschichte der Menschheit*, i, 184.) Haeckel is not so

The elephant-bearing lava, nevertheless, was of a different character. Exactly the same lava as that containing human remains was subsequently observed, however, at another point. This did not enclose the bones of the Pliocene elephant, but it did enclose those of the mammoth or Champlain elephant, which lived after the reign of ice. These were associated, also, with the remains of other Champlain animals. Thus it was demonstrated that "the man of Denise," as he has been called, was not preglacial. What remains unaccountable is the persistence of French and German anthropologists in parading "the man of Denise" as a specimen from the depths of the Tertiary age.

Again, the river-drifts of the Somme have been set down as glacial or preglacial; and hence the human flints which they contain were made by men who lived at a period vastly more remote than the accepted epoch of human creation. These are the relics, the reports of which sounded through the world thirty years ago, and first startled us with the claim that all the popular Adamic chronology was fallacious. A commission of English geologists went over to investigate the gravels, and concluded that they are post-glacial. Nevertheless, certain French geologists continued to proclaim "tertiary man," and some of them seem unable to unlearn that phrase. The opinion is hazardous. Abundant localities are now known, in the valley of the Somme, in which

radical as to dismiss his caution: "Das wahrscheinlichste ist dass dieser wichtigste Vorgang in der irdischen Schöpfungsgeschichte gegen Ende der Tertiarzeit, Stattfand; also, in der Pliocenen vielleicht schon in der Miocenen Periode—vielleicht aber auch erst im Beginn der Diluvialzeit. Jedenfalls, lebte der Mensch als solcher in Mitteleuropa schon während der Diluvialzeit." (Haeckel, *Natürliche Schöpfungsgeschichte*, 4th ed., p. 594.)

it appears, to a demonstration, that the entire river-valley was excavated after the glacial drift was laid down. The valley is cut through the glacial drift and into the chalk. But the flint-bearing gravels are still more recent, having been deposited along the chalk slopes of the valley. Examples are seen at Menchecourt and other places. Exactly similar phenomena occur in the valley of the Ouse, in England, at Biddenham and Summerbonn Hill, and in the valley of the Lark, at Icklingham.

In 1856 a human skull, and numerous bones of the same skeleton, were exhumed (but now mostly lost) from the Colle del Vento, in Liguria.* These were reported by Issel to be associated with extinct species of oyster, of Pliocene age. The age of the bones is questioned by Pruner Bey; and, as no naturalist saw the remains *in situ*, we must candidly await further investigation.

A few years ago a sensation was created by the report of a human pelvis found at Natchez, Mississippi, in a deposit of undoubted preglacial age. But that learned traveler and sagacious observer Sir Charles Lyell, on visiting the spot, discovered that Indian graves had existed at the top of the bluff; and, though he had himself employed the facts as popularly interpreted, he at once recognized the strong probability that the pelvic bone had fallen down the bluff from the summit. From being the relic of a preglacial man, it suddenly became the bone of a red Indian, perhaps a hundred and fifty years old.

I have attempted to enumerate all the grounds on which belief in man's preglacial existence in Europe is based. Those grounds have all proved fallacious; and we are left to rest on the *general tenor* of the

* Issel, in *Congrès International*, 1867, pp. 75, 156.

evidence connected with the occurrence of human remains. This proclaims, everywhere, the advent of man in Europe to have been subsequent to the general glaciation. But it happened during the progress of the disappearance of the glaciers. He was an inhabitant of France while the rivers were still swollen from the melting snows. He lived there at an early date in the Champlain Epoch. As he did not originate in Europe; as he was not planted under conditions so rigorous, it remains to determine where, and how long previously to his European advent, the human species had been in existence. The question relating to the primitive locality of man I have considered in a previous chapter; that concerning the absolute epoch of his advent I shall restrict to European man.*

As to the human remains reported from beneath Pliocene lava-beds in California, I see no reason for rejecting the highly competent and recently repeated testimony of Professor J. D. Whitney, late Director of the Geological Survey of California. The following is from a report† of a lecture delivered by Professor Whitney, in Cambridge, Massachusetts, April 27, 1878. During the Pliocene and previous epochs, the surface

* The above conclusion respecting the absence of all valid evidence of the existence of Tertiary man in Europe has been formally enunciated by the Anthropological Society of London, as reported in *Nature*. Professor Huxley, in an address before the Department of Anthropology, in the Biological Section of the British Association, at its Dublin meeting, in 1878, said: "That we can get back as far as the Epoch of the Drift is, I think, beyond any rational question or doubt; that may be regarded as something settled; but when it comes to a question as to the evidence of tracing back man further than that — and recollect drift is only the scum of the earth's surface — I must confess that to my mind the evidence is of a very dubious character. (*Nature*, Aug. 22, 1878, p. 448.)

† *New York Tribune*, April 30, 1878.

of western California had become deeply eroded by the rivers. "During the Pliocene, California and Oregon became the theater of the most tremendous volcanic activity that has devastated the surface of the globe. The valleys of the rivers in the Sierra were filled, and much of the country, particularly toward the north of California, was entirely buried in lava and ashes. Since then the rivers, seeking new channels, have made for themselves deep cañons, leaving their old beds deeply buried under the lava. These old buried river-gravels are very rich in gold, and extensive tunneling into the sides of the mountains and under the old lavas has been done. In one of these old river-bottoms, *under the solid basalt of Table Mountain*, many works of human hands have been obtained, as well as the celebrated human skull of the Pliocene, now so well known in connection with 'Brown of Calaveras.'* The age of these deposits under the lavas is known to be Pliocene, on account of the remains of the contemporaneously buried flora and fauna, which were almost totally unlike the flora and fauna of California at the present time. That the skull was found in those old, intact, cemented gravels, *has been abundantly proved* by evidence that cannot be gainsaid. At the time it came into the speaker's hands, the skull was still imbedded, in a great measure, in its original gravelly matrix. In this condition it was taken by him to Cambridge, where, under his charge, and in the presence of Professor Jeffries Wyman, of Harvard University, and Professor W. H. Brewer, of Yale College, the imbedding matrix was chiseled away. In and about the skull were found other human bones, including some that must have belonged to an infant. Chemical

* An allusion to Bret Harte's poem.

analysis shows that it is a true fossil, its organic matter being almost entirely lost, and the phosphate of lime replaced by carbonate of lime. So far as human and geological testimony can go, there is no question but that the skull was found under Table Mountain, and is of Pliocene age."

This is by far the best authenticated instance of Pliocene man which has been brought to light. There is only a *presumption* which weighs against it; the skull was not inferior to that of existing races. But we cannot counterpoise observation with presumption. I am ready to admit that man — probably Mongoloid man — wandered in California "before the mighty peaks of the Sierra Nevada or the Cordilleras were upheaved; before the cataracts of the Yosemite or the Yellowstone began to flow; before the glaciers carried their freight of rubble and precious minerals into the lowlands, and even before the vast cañons were split through the solid rock." But this was a preadamite man, and the fact has no bearing on the chronology of the Bible. It was a man of the same race as the Troglodytes of Europe, and affords ground for the *à priori* presumption that man may have found his way into Europe as early as the Pliocene Period. When we find relics of the European Stone Folk beneath beds of Pliocene lava, we shall have good ground for forming an opinion which cannot, at present, be scientifically entertained. Let us look at the geological relations of prehistoric men in Europe.

The question of the absolute measure of time since the advent of man in Europe becomes simply the geological question of the remoteness of the epoch of general glaciation. Before I consider this question let me remind the reader of the probable relation of mankind to that grand geological event. There was a

time, late in geological history, when nearly all Europe was covered by glaciers, as they now linger in the valleys of the Alps. During the same period all North America, as far as the Ohio river at Cincinnati, was similarly glaciated. It is my personal opinion that all northern Asia was buried in ice at the same time, though the boulder phenomena of glaciated surfaces may have been completely buried, in Siberia, by finer deposits of later date. Of course man was absent from these regions during the prevalence of the continental glaciers. But as man appeared in Europe immediately on the decline of the glaciers, and as these first European men were far advanced beyond the lowest human type, it must be that the infant races had been in existence in the tropical zone during the pendency of the great glaciers, that is, during the Glacial Period, if not also during some portion of Tertiary time.

The great accumulation of snow and ice upon the northern hemisphere tended to depress the land, so to speak, in that hemisphere. In other words, the land in that hemisphere was partially sunken beneath the sea; and correspondingly, the water in the southern hemisphere was drawn northward from its ancient basin, and many formerly submerged areas became dry land. Hence the great ocean which stretched from western Europe through southern Asia to the China sea: hence Lemuria and the Malay continent, and the widespread areas which almost bridged the Pacific from Asia to South America: hence the necessary but well provided advent of the first men, in the southern hemisphere. Now, with all these land communications in the south, the feeble races, or at least the infant races, spread themselves over Lemuria, Malaya, Prepolynesia and Africa. They crowded

northward to the shore of the great iceberg-bearing ocean. The tropical climates were less oppressive than now; chill winds swept, sometimes, across the ocean from the fields of perpetual snow which rested over Europe, as in our times the fiery simoon from the Sahara sweeps across the Mediterranean into Italy.

A geological springtime arrived. The great glaciers began to shrink back from the fierce presence of the sun. Certain tribes had dwelt always near the borders of the secular ice-fields. They had crowded northward into the Iberian peninsula, and awaited there the opportunity to follow the glacial retreat. They were Mongoloids from the far preasiatic stem in eastern Asia; they swarmed into Europe while it was yet covered with the deluge of glacial dissolution; the rivers were permanently swollen, but these hardy men chose the situation for their home; and, as the glaciers continued to retreat, the Troglodytes continued to follow northward and take their dogs and their reindeer with them.

It may be conjectured that it was about the same time that the Asiatic Mongoloids began to follow the retreating glaciers of their continent. I imagine all southern Asia was swarming with people of the Mongoloid and Dravidian types. The former were pressing forward as fast as the rigors of the geological winter yielded. While yet the borders of the Asiatic glacier lingered about the northern shores of the Caspian, I think the Adamites were in existence. The Zend-Avesta has some passages which convey the idea that the Iranians had encountered winters of intolerable severity. From this condition of things, events have marched with steady and even step to our own times. When we come now to investigate

the antiquity of the Stone Folk in Europe, it becomes simply an investigation of the remoteness of the last glaciation of the northern hemisphere. Many geologists have expressed the opinion that this is measured by tens, if not by hundreds of thousands, of years.* I propose to explain concisely the grounds on which such estimates have been based, and to show that they are far from conclusive.

I. *The astronomical hypothesis of glacial periods.* It will be remembered by those who have read Professor Croll's epoch-making volume, on *Climate and Time*, that certain astronomical changes tend to bring the earth and the sun periodically into such relations as to extend the arctic ice-cap over the north temperate zone. These changes are the precession of the equinoxes, and variations in the obliquity of the ecliptic and in the eccentricity of the earth's orbit. M. Adhémar holds that the precession of the equinoxes leads to the glaciation of the northern hemisphere once in about 21,000 years.† If it is 21,000 years from one geological midwinter to another, it

* Caspari says: "Dass die Steingeräthe welche, zusammt den knochen des Mammuth, des Höhlenbären und des Rennthiers, selbst bereits in miocänen Schichten angetroffen werden, ein muthmassliches Alter von Hunderten von Jahrtausenden besitzen müssen." (Caspari, *Urgeschichte der Menschheit*, I, 184–5.) It must be expected that many men, who are not geologists, will be found ready to admit these rash claims. M. François Lenormant, an eminent archæologist and historian, freely recognizes the existence of man even in Middle Tertiary time — and that not an undeveloped savage, but such an exalted being as Adam is pictured in the Bible. Subsequent savagism was the consequence of Adam's sin which called down the "divine curse"; and "the appearance of cold, intense and permanent, which man was scarcely able to support, and which rendered a great part of the earth uninhabitable," was one "among the chatisements which followed this fault of Adam." (F. Lenormant, *Les premières Civilisations*, pp. 11, 18, 49, 50, 53, 63.)

† J. Adhémar, *Revolutions de la Mer*, Paris.

must be 10,500 years from a geological midwinter to a geological midsummer. As we may assume the present to be a midsummer, we would be, on the theory of Adhémar, 10,500 years from the mid-epoch of the glacial period; or somewhat less than that from the decline of the glacial period, when man seems to have appeared in Europe. If this theory could be established, it would be satisfactory; but it is not generally accepted. Mr. Croll, on the other hand, has shown that variations in the eccentricity of the earth's orbit are a vastly more efficient cause of glaciation than the precession of the equinoxes. But the intervals between the maxima of eccentricity are vast, and they are of unequal value. The last maximum occurred about 80,000 years ago; and Mr. Croll is of the opinion that the last secular mid-winter passed 80,000 years ago. This being the case, I should judge that the stage of decline which first witnessed man in Europe cannot be removed less than 50,000 years. That is, Mr. Croll's theory implies that the Stone Folk were in Europe 50,000 years ago. This, to my mind, throws doubt on the otherwise plausible theory; for I cannot believe the archæological evidences sustain any such antiquity.

II. *Contemporaneousness of man with animals now extinct.* It was once a favorite doctrine of geology that animal extinctions date back to a remote past. When, therefore, we obtained evidence that man had been a contemporary of the extinct mammoth and cave-bear, it was natural to conclude that his antiquity is great. But geology had been mistaken. Extinctions of species are not necessarily remote in time. Extinctions have taken place within the scope of human memory and tradition. In New Zealand, the tradition is still vivid of the extinct

gigantic birds known as the moa, palapteryx, and notornis. In Madagascar and the Mauritius, the dodo, the solitaire and the æpyornis have become extinct in modern time. These were vestiges of the fauna of the old Lemurian continent. The Dutch navigators brought to Europe accounts, specimens, and a painting of the dodo as they saw it. There was once a stuffed, mounted skin of the dodo in the British Museum; but one summer it happened that the cleaners and renovators of the museum decided that the old moth-eaten skin was not worthy of the space it occupied. In the spirit of the Tammany Commissioners of Central Park, they threw it on the rubbish heap. The great British Museum contains now only an imperfect skeleton of the dodo; and no money will purchase a better specimen. Amongst mammals, the urus has become extinct from Europe since the time of Cæsar. An arctic manatee has totally disappeared from the Atlantic ocean. The huge *Rhytina gigas* is utterly extinct; and so, also, as far as we know, is the *Balæna biscayensis*, a whale which was once the basis of a flourishing industry on the coasts of France and Spain.* Dr. Schliemann, in the progress of his

* "Prof. Turner, of Edinburgh, has been collecting and investigating a number of rare prints of sperm whales stranded on European coasts at the end of the sixteenth century and beginning of the seventeenth. One of these illustrates a whale caught in the port of Ancona in 1601, fifty-six feet long and thirty-three feet in girth. . . . The Netherlands seem to have had numerous specimens stranded. These, like those occasionally visiting the Scottish coast, are all males, which, when fully grown, appear to go singly in search of food. Other whales, as cachelots, visit the south in larger numbers. Over thirty cachelots, mostly females, were stranded in 1784 in the bay of Audierne, department of Finisterre; and a school visited Citta Nuova, in the Adriatic, in 1853." (*Nature*, No. 474, 28th Nov. 1878, p. 76.)

excavations upon the site of ancient Troy, is reported to have discovered "billions" of shells of cockles and mussels "found in all the strata of the prehistoric *débris*," and said to be no longer found on the shores of the Hellespont and Ægean.*

In the next place, many species are visibly approaching extinction. The great auk of Newfoundland was recently considered extinct, as no specimen had been seen for twenty-five years. But I understand that in 1877 or 1878 some fresh eggs have been seen. † The Labrador duck is said to be extinct, or nearly so. As far back as 1862–1867 these ducks were of common occurrence in the Fulton Market, New York. Suddenly they became scarce; and the proprietors of museums find that this duck is now unattainable. The specimens in existence are even fewer than those of the great auk.‡ So the capercailzee, a species of grouse exceedingly common in Denmark in the Stone Age, is at present seldom seen. The great aurochs, or European bison, would long since have disappeared had not the Prussian government provided for its preservation in the for-

* London *Times*, 27th Nov. 1878; *Nature*, No. 474, 28th Nov. 1878, p. 85. Mr. Alfred Newton, in an address at the meeting of the British Association, in 1876, intimated that the zebra has become extinct within twenty-five years. (*Nature*, 14th Sept. 1876; *Am. Jour. Sci.*, Dec. 1876, p. 476.) In reference to this there must be a mistake, for Stanley, in his journey "Through the Dark Continent," speaks of shooting the zebra for food.

It is said that no less than thirty species of birds and mammals have become extinct within historic times. (Pozzy, *La Terêe et la Rêcit Biblique*, p. 418.)

† "Dr. Hays, in his 'Land of Desolation,' mentions that one of these auks was killed in Greenland in 1867, but that the native who killed it, not knowing its value, sacrificed it to appease his appetite." (Letter in Cincinnati *Commercial*, 11th Aug. 1878, p. 2.)

‡ New York *Tribune*, 22d Dec. 1877.

ests of Lithuania. The "Big Trees" of California belong to a species which is on the verge of extinction. Thousands of years ago the *sequoia* was exceedingly abundant in America and Greenland; but it survives now, like so many other organic forms, to report some tidings of a remote past. In short, it may be said that all animal species which are unable to occupy the continent with civilized man are destined to extinction, and are in process of extinction. The beaver, the otter, the wolverine, the wild-cat, the panther, the bear, the red deer, and many other mammals which might be named, are doomed to disappear from the earth unless they can find homes in regions beyond the reach of civilized man.*

To these classes of examples may be added some other extinctions which are evidently recent, though we possess no articulate traditions of the existence of the species in human times. The Indian, indeed, retained a savage's tradition of the mammoth,— the great beast which his ancestors hunted, and which has left its bones in all the peat-beds of the United States and British America. I have myself exhumed the remains of the mammoth, in Michigan, from a deposit of peat not over eighteen inches deep; and, on the contrary, I have received flint arrow-heads from the same county, which had been exhumed from beneath seven feet of peat. From the mounds near Davenport, Iowa, was obtained a pipe carved in the form of an elephant — body, limbs, head, trunk, all but tusks,†— as good an evidence as the ivory etchings from the Madeleine Cave that man and the mammoth have been con-

* See further, on sub-fossil and recently extirpated birds, *Encyc. Brit.*, 9th ed., III, 731.

† See notice in *American Naturalist*, Apr. 1879, p. 269.

temporaries. The Irish elk has left its giant skeleton in bogs which cannot be older than those of Denmark, and which are rich in the relics of the Stone Folk. This species, indeed, is known to have survived till the fourteenth century.*

It seems that we must regard the gradual extinction of species as the order of nature. Species are constantly dropping out of existence. The contemporaneousness of man with the extinct mammoth is no more proof of man's high antiquity than the coëxistence of the dodo and the Dutch painter is proof that the Dutchman lived a hundred thousand years ago.

3. *The magnitude of the geological changes since man's advent.* When we say that man was witness of the disappearance of the continental glacier from Europe, we seem to imply that he lived in a remote antiquity. When we learn that since man's advent England and Scandinavia have been joined to the continent, the North Sea has been dry land, and the Thames a tributary of the Rhine, we seem to sink back into geological time, where anything less than an antiquity of a hundred thousand years for man would be a ridiculous demand. When we conclude that the Mongoloid came to North America over an isthmus which once existed at Behring's Straits, or reached South America at a date so remote that a continent has since disappeared; when we discover evidence of the "red" man's existence in Illinois while the prairie region was still the bed of a great lake, we feel strongly tempted to believe that a great cycle of geological history separates us from the red man's advent in America. When we find his bones buried beneath cubic miles of ancient lava, and built

* On indigenous quadrupeds and birds extirpated from Great Britain see Lyell, *Principles of Geology*, 8th ed., p. 660.

into the very structure of mighty mountains, we feel a valid assurance of a geological date for immigration to America. When we find relics of pottery buried at the depth of ninety feet beneath the mud of the Nile, we feel that the Egyptians and Chinese have claimed an antiquity no greater than the evidences sustain.

But I believe, on sober reflection, that our imaginations have been excited. The mystery and the magnitude of geological changes seem to relegate them to the remote ages of convulsion and cataclysm. Let us not be frightened. We are in the midst of great changes, and are scarcely conscious of it. We have seen worlds in flames, and have felt a comet strike the earth. We have seen the whole coast of South America lifted up bodily ten or fifteen feet and let down again in an hour. We have seen the Andes sink 220 feet in 70 years. The Chinese possess authentic records of changes in the location of great rivers — especially the Hwangho. This river has changed its mouth two or three times. Sometimes it discharges its waters into the Gulf of Pechili, and sometimes into the Yellow Sea. When it changes its outlet, many thousand square miles become inundated. Vast transpositions have also taken place in the coast-line of China. The ancient capital, located, in all probability, in an accessible position near the center of the empire, has now become nearly surrounded by water, and its site is on the peninsula of Corea.*

We have seen the glaciers make progress in their retreat and disappearance. An ice-peak in the Tyrolese Alps has lowered 18½ feet in a few years. It has also shrunken along its borders. The Mer de

*See Pumpelly, in *Smithsonian Memoirs*, 4to, Vol. XV., art. iv; also Von Richthofen, *China*, pp. 285–6–7.

Glace is a hundred feet lower or thinner than it was thirty years ago. At Chamonix I conversed with the Chief of the Guides, an old man who had recorded the phases of the glaciers for more than fifty years. He pointed out the limits of the Mer de Glace and Glacier des Bossons in 1818, 1819 and 1820. He showed me huge boulders which had formerly been deposited in the valleys near the termini of these glaciers. He pointed out the striations made on the bounding walls of the glacier valleys. From these records I perceived that these two great glaciers have receded, in fifty years, not less than half a mile; and the volume of ice is lowered at least 200 feet.* From the foot of the Mer de Glace I traced the footsteps of the receding glacier down the valley of the Arveiron — down the valley of the Arve — down the Arve all the way to Geneva. Then I felt that I also had gazed on the ancient glaciers. I had seen how their stupendous work had been done. I had come upon the earth in time to see the continental glaciers of Europe on their retreat up the gorges of the Alps. I felt the Stone Folk drawn down in time toward our own times. I could look *over* the abyss of years, and seize its span in my apprehension. *We* are witnesses of the retreat of the glaciers. When the Stone Folk came to Europe the southern border of the continental ice-field was, perhaps, on the Rhine; now it is in Russia and Siberia and Greenland. Even in America, we arrive in time to glimpse some vestiges of the ancient glacier. Those remarkable ice-wells in Vermont, in New York and

* See also some valuable data in Payot, *Guide Itineraire du Mont Blanc*. The reader will also find a large number of collateral facts in Tyndall, *Hours of Exercise in the Alps*.

Wisconsin,* I judge to be fed only by buried fragments of the old ice. In Siberia the buried ice, also, has grass-covered soils above it; and Dr. Edmund Andrews has called attention to the marks of ancient ice-blocks buried in the drift, which were brought to light in excavating the tunnel for the water-works of Chicago. Nor have the veritable glaciers become extinct from the United States. In the deep gulches of the Sierra Nevada are sundry remnants of a glacier once continent-wide. On these repositories of ancient ice has accumulated the "dust of ages," to which the cosmical dust which comes to us out of the depths of space has made contributions not inconsiderable. But they lie there in their senescence, to proclaim a chapter of past events in American history — fossil glaciers, as eloquent as a fossil world. The truth is, we are not so far out of the dust and smoke of antiquity as we had supposed. Antiquity is at our doors. The rubbish of geological revolutions is strewed about our feet. We are in the midst of geological history. The Indian saw Lake Michigan spread its waters over Illinois. We have seen cities grow up where our childhood knew only a swamp; and our children will see the swamp usurp the site of the lake which nourishes it. It is not a remote epoch which witnessed the laying down of the site of New

* On ice-wells in Vermont see Hitchcock's *Geological Report*, Vol. I, p. 192; in Owego, N. Y., *Amer. Jour. Sci.*, Vol. XXXVI, p. 104. For an account of an ice-mountain in Virginia see *Amer. Jour. Sci.*, Vol. XLV, p. 78; for one in Wallingford, Vermont, see *Amer. Jour. Sci.*, Vol. LVI, p. 331. For an account of ice-deposits in the Alps and Jura, see *Edinb. Phil. Jour.*, Vol. VIII, p. 1, also p. 290. On ice-caverns in Russia see *Geology of Russia*, Vol. I, p. 186, and *Lippincott's Gazetteer*, art. "Yakotsk." On the relics of glaciers in the Sierra Nevada see Joseph Le Conte, in *Am. Jour. Sci. and Arts*, [3] III, p. 125; X, 126, and *Proc. Acad. Sci. Cal.*, IV (part v), 259.

Orleans. The land grows seaward 338 feet annually. Humphreys and Abbot estimated that the whole delta of the Mississippi had been laid down in 5000 years.* De Lanoye makes the delta of the Nile but 6350 years old.† The Sea of Azof once extended farther east than the Euxine, and the Oarus or Volga emptied into it.‡ The Greeks retained a tradition of great hydrographic changes about the Black Sea. The Symplegades, or floating islands, were only landmarks which changed their positions relatively to the changing shore-line. There was a time when the rocky barriers of the Thracian Bosphorus gave way and the Black Sea subsided. It had covered a vast area to the north and east; now this area became drained, and was known as the ancient Lectonia — from 2000 B.C. the home of the warlike Scythians, — now the prairie region of Russia and the granary of Europe. Bergsträsser has shown that during its former high level it was confluent with the Caspian and Aral seas;§ and thus another Mediterranean stretched eastward beyond the Dardanelles. An American engineer has proposed to reunite them.‖

Such events have taken place in historic times

* Humphreys and Abbot, *Report on the Mississippi River*, 1861.

† De Lanoye, *Ramsès le Grand ou l'Egypt il y a 3300 ans*, trans., New York, 1870.

‡ Rawlinson's *Herodotus*, III, 66 and map. Herodotus says this sea, in his time, was not very much inferior to the Euxine in size. Bk. IV, 86.

§ Bergsträsser, *Réunion de la mer Caspienne et la mer Noire*, Paris. See further, Huxley, *Critiques and Addresses*, p. 164.

‖ Spalding, in *Report to Geographical Commission of Russia*. The nature of the ancient hydrographical conditions of the Aralo-Caspian region, and the advantages and practicability of restoring them, are the objects of a Russian scientific survey now in progress.

and before our eyes.* I think we must admit that the greatest events which separate us from the age of the Stone Folk do not necessitate many thousands of years for their consummation. Whether, then, we consider the magnitude of the geological changes since the advent of European man, or his contemporaneousness with animals now extinct, or his succession upon the continental glacier, we *do not* discover valid grounds for assuming him removed by a distance exceeding six to ten thousand years.†

Investigators occupied with the relics of primeval man, in Europe, have endeavored to deduce a numerical expression for his antiquity from the indications of these relics. Morlot, from the study of the layers constituting the "cone of the Tinière,"—a deposit formed by a torrent discharging itself in the Lake of Geneva,—concluded that the Polished Stone Epoch dates back 4700 to 7000 years. Gillieron, from researches at the Bridge of Thièle, is led to fix the Epoch of Polished Stone at 6700 years. Steenstrup, from investigations in the bogs of Denmark, is led to regard 4000 years as a minimum for the Epoch of Polished Stone. De Ferry, from a study of the river-drifts of the Saône, puts the Polished Stone Epoch at 4383 years, and the Epoch of the Mammoth at 5844 to 7305—fortunate if the thousands are as exact as the units in these figures. Arcelin, from a separate

* Further on this subject see Lubbock, *Prehistoric Times*, 3d ed., p. 419, etc.; art. "Ogyges," in Anthon's *Classical Dictionary*; Warren, on the drainage of the St. Croix Lake, in *Proc. Amer. Assoc.*, XVIII, 207, and his Official Report.

† This is the conclusion of Dr. Friedrich Pfaff, *Die neuesten Forschungen und Theorien auf dem Gebiete der Schöpfungsgeschichte*, Frankfort-on-the-Main, 1868. I do not intend this estimate to cover the age of the "Man of Calaveras," who seems to have lived in Pliocene time.

study of the drifts of the Saône, put the Roman Epoch at 1500 to 1800 years; the Iron or Keltic Age, from 1800 to 2700 years; the Age of Bronze, from 2700 to 3000 years; the Epoch of Polished Stone, from 3000 to 4000 years; and the blue clays, containing remains of the mammoth, from 6700 to 8000 years. Le Hon, in view of all the results and all the facts, publishes the following estimates:

	Years.
Appearance of Iron in the West,	2700
Age of Bronze, properly so-called,	2700 to 4000
Age of Polished Stone (Neolithic),	4000 to 6000
Age of Reindeer, to beyond,	7000
Age of the Mammoth (Palæolithic),	not estimated

It cannot be pretended that these estimates are extravagant. They are so much more moderate and rational than the wild guesses in which some geologists and anthropologists have indulged, that I feel indisposed to offer any adverse criticisms. These estimates, it will be noticed, are based on the legitimate data of an archæological induction, and not on any theory of the length of geological periods; still less on any astronomical hypothesis whose exigencies exceed, so egregiously as Croll's, the demands of the facts to be chronologically coördinated. Our historical data are sufficiently accordant. When the Hamitic Pelasgians entered Greece, about 2500 B.C., they introduced bronze and iron. We have no evidence that bronze had not been known at an earlier period. They found the Stone Age still persisting, at that date, in southeastern Europe, and were the means of bringing it to a termination. But in central and northern Europe the Age of Stone was prolonged many centuries.

At dates earlier than 2500 B.C., we have some

historical evidence that the Stone Folk were in Europe. It is thought that the Iberians, from Atlantis and the northwest part of Africa, settled in the southwest of Europe at a period earlier than the settlement of the Egyptians in the northeast of Africa. In short, the Iberians spread themselves over Spain, Gaul and the British islands as early as 4000 or 5000 B.C. They found everywhere that the Stone Folk had preceded them. That is, we are in possession of historical data which lead to the conclusion that the Age of Stone stretches back 5800 to 6800 years. This date is determined from Egyptian records which commemorate warlike movements among the Iberian Libyans, the Hamitic Pelasgians and the Aryan Greeks. For instance, the Libyan Amazons of Diodorus,—that is to say, the Libyans of the Iberian race,—must be identical with the Libyans with brown or grizzly skin, of whom Brugsch has already pointed out the representation figured on the Egyptian monuments of the Fourth Dynasty.* These representations, according to the chronology of Brugsch, mount to 3500 B.C., or according to Chabas, to 3000 B.C. The Fourth Dynasty, according to Wilkinson, dates from about 2420 B.C. At this date the Iberians had become sufficiently powerful to attempt the conquest of the known world. It is easy to believe that one or two thousand years had elapsed since their first appearance in Europe; and this concession brings us to, say, 4000 B.C., as the remotest date to which historical information authorizes us to trace the Stone Folk, who were the predecessors of the Iberians.

The Stone Folk had lived somewhere, if not in Europe, at an earlier date. The Iberians had already consumed unknown centuries in wanderings, wars and

* Jubainville, *Les premiers Habitans de l'Europe*, p. 47.

the development of a rude civilization; but the scene of their activities was probably within the tropical or sub-tropical regions of Africa and Asia.

The third aspect of the question of man's antiquity, "The Epoch of the Adamites," I reserve for another chapter.

CHAPTER XXVIII.

THE PATRIARCHAL PERIODS.

A DISCUSSION of the "Epoch of the Adamites" is simply an examination of the chronological data of Genesis. In the eighth and ninth chapters of the present work I have presented all which needs to be said respecting the historical and monumental chronology of the Hebrews and other ancient nations. I shall only offer here some views connected with the allowance of a longer time between Adam and Abraham than the accepted chronology assumes.

In maintaining that the Black (and other) races are descended from preadamites, I have depended largely on the truth of the two following propositions: (1) The time from Adam (according to accepted chronology) to the date at which we know the Negro type had been fully established is vastly too brief for so great a divergence, in view of the imperceptible amount of divergence since such date. (2) No amount of time would suffice for the divergence of the Black races from the white man's Adam, since that would imply degeneracy of a racial and continental extent, and this is contrary to the recognized principle of progress in nature. When the question is raised in reference to the Brown races, the chronological and physiological difficulties are less; but the phenomena of race persistence, ethnic affinities and geographical distribution force us to the conviction that their moderate inferiority to the White race is something also coördinated with a preadamic origin. But even this conclusion

does not wholly relieve us from the inconvenience of a chronological strait. Admitting Adam to be the progenitor only of the Mediterranean race, the collocation of events in the Genesiacal records creates an urgent demand for more time than the Usherian chronology allows.* What we need is a longer interval between Adam and the dawn of written history, and especially between Adam and the Deluge. The very record itself presents us ethnological data which would be greatly accommodated and relieved by a larger allowance of time. The fourth chapter of Genesis, for instance, appears to have been composed before the Deluge — perhaps in the 500th year of Noah (Genesis v, 32); but at that time there were peoples in existence, descended from Cain, who were celebrated for agriculture, mechanics and music. They were, indeed, descended from Jabal, Jubal and Tubal-Cain, of the eighth generation from Adam. But, as the ten generations from Adam to the 500th year of Noah

* Prichard, in his great work on the *Physical History of Mankind*, not only maintains the unity of the human species and the Adamic origin of all men, but feels compelled to admit that the magnitude of the transformations which have taken place in human races demands a much larger allowance of time than accepted chronology affords. Bunsen, as I have stated, appropriates 10,000 years. The Duke of Argyll says: "The older the human family can be proved to be, the more possible and probable it is that it has descended from a single pair"; and he intimates that the Bible and science concur in allowing a much higher antiquity than generally assumed. (*Primeval Man*, pp. 126, 128, etc.) Scientific opinion is virtually unanimous that the popular systems of chronology do not afford sufficient time for the diversification of human races. Compare Lyell, *Principles of Geology;* also the authorities already cited. Friedrich Müller records the opinion that the Hamites came out of Asia into Africa 9000 or 10000 B.C. These pushed on to Libya and Æthiopia. The Ægyptian immigration is fixed "at least at 8000 to 9000 before our epoch." (Fr. Müller, *Novara-Expedition, Ethnologie*, p. 98.)

cover only 1526 years, we may assume the eight generations to Tubal-Cain to cover about 1245 years; and hence, from Tubal-Cain to the 500th year of Noah we have only about 300 years, which is insufficient time, in the infancy of the world, for the growth of tribes and nations and culture which seem then to have been in existence.

Take another case. The tenth chapter of Genesis narrates a series of events which took place after the Flood and before the division of the land in the time of Peleg. Computing the time in the usual way, the interval from the Flood to the birth of Reu, the son of Peleg, was 131 years; and, according to the usual rate of increase, the posterity of Noah must have amounted to about 900 persons. This chapter was written in the time of Peleg, as otherwise the history would have been brought down to a later date, as it is in the eleventh chapter. But note the progress which had been made in the settlement of the world and the building of cities at the date of this composition. The posterity of Japheth had moved westward and taken possession of the islands of the Ægean and the Mediterranean, and probably the adjacent continental regions, and had spread over the vast territory of Scythia on the north, and penetrated to Spain on the west.* They had become separated into distinct "languages, families and nations." This is a glimpse of ethnic events which we cannot reasonably assume to have taken place in 131 years. The conviction is strengthened the more we consider the vitality of linguistic forms among the peoples of Mediterranean race. Again, the descendants of Ham had accomplished even greater results. Egypt had been settled, and its population had become differ-

* See chapter v.

entiated into at least eight tribes or nations.* Phœnician Sidon had been built, and the Phœnicians had grown into nine peoples, "and *afterward* the families of the Canaanites spread abroad." But before the Canaanites, there were present in Palestine the Rephaim, Zuzim, Emim and others. Who were these peoples? I have heretofore insisted on the probability that they were Hamites. Whoever they were, their career in Canaan, antecedently to the presence and productive activity of the Semites, deepens the conviction that 131 years is an insufficient allowance of time. Hamitic Nimrod, also, or his posterity, had planted cities. Babel, Erech, Accad and Calneh were the "*beginning* of his kingdom." Then Asshur arose among the Nimrodites and led away a colony, which built other walled cities—Nineveh, Rehoboth, Calah and Resen, which was "a great city." Thus the descendants of Ham had developed "families and tongues and countries and nations." The posterity of Shem, also, had become divided into "families and tongues and nations," and dispersed to many "lands." Accordingly the descendants of Noah, in the days of Peleg, had become numerous "nations," and divided the earth among themselves. Now, it is difficult to believe that these cities and nationalities had come into existence from one family in the space of 131 years.

A similar set of considerations is furnished by the eleventh chapter of Genesis, which seems to be a distinct document, and begins back at an epoch near the Flood, and preserves the history down to Abraham. Journeying westward, the Adamites, as yet one family, attempted to build a tower, and were defeated. Still, it appears, a city known as Babel

* See chapter iii.

rose into existence; and it would be fair to presume that this and the other cities named as the beginning of Nimrod's kingdom, instead of being built by him or his successors, were already in existence long before the time of Nimrod. How much, then, beyond 131 years must the time from Noah to Peleg be elongated?

I have heretofore employed such facts to indicate the grounds of the biblical presumption that the population of the world, in early Genesiacal times, had not all been derived from the stem of Noah, or even of Adam. This argument assumes strength in proportion to the confidence with which we hold to the Usherian chronology; and those who defend that chronology must consistently admit the probability of preadamites. But those who deny, for any reason, the existence of preadamites, must consistently admit the pressure of biblically recorded facts for a more generous chronology than Usher has left us. That is the point here made. But, for my own part, I do not think one exigency excludes the other. We must admit the evidence of preadamites regardless of chronology; and we must admit the existence of a demand for more time, regardless of the existence of preadamites.

This unsatisfactory brevity of the popular chronology confers great interest and importance on the attempt recently made by Rev. T. P. Crawford * to show that the Genesiacal language, when properly interpreted, expands the patriarchal periods to more than four times the accepted length. I deem it an

* Crawford, *The Patriarchal Dynasties from Adam to Abraham shown to cover 10,500 years, and the highest human life only 187.* 12mo, pp. 165, Richmond, Va., Josiah Ryland & Co. Mr. Crawford dates from Tung Chow, China.

appropriate sequel of this discussion of the antiquity of man to explain Mr. Crawford's method.

The fundamental position assumed by the author is a reformed reading of the genealogical tables contained in the fifth and eleventh chapters of Genesis; the first of which traces the posterity of Adam to Noah, and the other traces the posterity of Noah to Abraham. For the purpose of giving an intelligible explanation of Mr. Crawford's reformed reading, I here reproduce the biblical paragraph touching the family of Adam:

"And Adam lived an hundred and thirty years, and begat *a son* in his own likeness, after his image; and called his name Seth. And the days of Adam, after he had begotten Seth, were eight hundred years; and he begat sons and daughters. And all the days that Adam lived were nine hundred and thirty years; and he died."

A similar paragraph is recorded respecting each of the antediluvian patriarchs. Now, the author maintains that the word Adam is employed, above, in a *personal*, and afterward in a *family*, sense; that the first clause denotes *the whole life* of Adam, and not his age at the birth of Seth; that YOLaD, translated "begat," signifies rather "appointed,"* and refers to Adam's designation of Seth (in place of Abel) to be his successor; that "likeness" and "image" refer, not to personal appearance, but to character and office, the name Seth itself signifying "The Appointed";†

*The verb YâLaD, according to Gesenius, signifies (1) *To bring forth;* (2) *To beget;* and under this comes the signification, *To constitute, to appoint,* as in Ps. ii, 7, "Thou are my son, this day have I begotten (constituted) thee" as King. A parallel reading is ἐγέννησα in 1 Cor. iv, 15, "In Christ Jesus I have begotten you through the gospel."

†Gen. iv, 25, SeTh seems to be from SITh, *to set, to place, to replace.*

that "Adam," in the next clause, refers to the tribe or family of Adam; that the Adamic family continued to be ruled over by successors, not in the line of Seth, for a period of 930 years; that thereafter the representatives of the Sethite line acceded to the kingship for 912 years, when the family of Enos assumed government, and so on.

These positions are argued with much ability. That the first clause expresses the whole life of Adam is maintained on the following grounds: 1. The Hebrew never employs the verb *lived* with definite numbers to indicate the age of a man at the birth of a son; but it invariably says such a one *was a son* of so many years *when* his son was born, or some other event took place. Many passages are cited, of which, see Genesis xxi, 5; xvi, 16; xvii, 24; xxi, 4; Leviticus ix, 3; Joshua xiv, 7; 1 Kings xiv, 21; xx, 42. On the contrary, the verb *lived* denotes the whole term of a man's life. See Genesis l, 22; xxiii, 1; xxv, 7; xlvii, 28; v, 5; xi, 11; ix, 28; 2 Kings xiv, 17; Job xlii, 16. 2. Antediluvian life is substantially asserted to have been one hundred and twenty years, on an average.* 3. There is nowhere in the Old Testament any allusion to such enormous ages as eight hundred and nine hundred years. On the contrary, Abraham, who was promised a "good old age," died at one hundred and seventy-five years.† So Isaac, at one hundred and eighty years, was "old and full of days."‡ For further details of the reasoning I must refer the reader to the work itself. A paraphrase of the passage concerning Adam would, therefore, read somewhat as follows:

* See Gen. vi, 3, "Yet his days shall be a hundred and twenty years."

† Gen. xv, 15; xxv, 7, 8.

‡ Gen. xxxv, 28, 29.

And Adam lived a hundred and thirty years. And at the close of his life he appointed his son to be his spiritual heir and successor, and designated him Seth, "The Appointed." And the duration of the house of Adam, after the appointment of Seth, was eight hundred years, represented by male and female descendants. And the whole duration of the house of Adam was nine hundred and thirty years, and it ceased to exist.

The paragraphs touching the other antediluvian patriarchs are to be similarly understood. It will thus appear that the average duration of life was then one hundred and twenty years. A similar interpretation of the eleventh chapter gives the average duration of life after the Flood at one hundred and twenty-eight years. After Abraham, the ages, as stated in the sacred text, range from one hundred and ten to one hundred and eighty years, with an average of one hundred and thirty-five years. These conclusions are countenanced by the duration of human life among other nations of parallel antiquity. The utmost limit of Egyptian life was one hundred and ten years. The average life of the eight kings of the second Chaldæan Dynasty was eighty-eight years. Under the first Chinese Dynasty, of four hundred and thirty-nine years, average life was seventy-seven years; under the second, of six hundred and forty-four years, it was sixty-nine years. These two dynasties extended from the days of Peleg to those of Solomon. Many other facts tend to show that human life, in the most ancient times, had a duration not far from that of the Hebrew patriarchs, if we interpret the first clause of each paragraph as proposed by Mr. Crawford; while the marvelous duration of human life according to the

popular interpretation is opposed to every item of knowledge which we possess from other sources, and is supported only by an interpretation of a document claiming to have originated in the infancy of civilization, and recorded in a language which for centuries has been extinct.

Applying these principles to the genealogical tables of Genesis, we obtain the following chronological table:

	Years.
From Adam to the Flood, - - - -	7,737
From the Flood to the Birth of Abraham, - -	2,763
From Adam to Abraham, - - - -	10,500
From the Birth of Abraham to Christ, - -	2,000
From Adam to Christ, - - - - -	12,500
From Christ to A.D. 1880, - - - - -	1,880
From Adam to 1880, - - - - -	14,380

Such an interpretation of the faint traces in our possession of a biblical chronology, whatever its apparent adaptation to the facts, and the exigencies which they create, must naturally stand or fall on the result of Hebrew investigation. It is the Bible alone which decides what we must understand by Adam; and the Bible alone must teach us what intervals its authors intended to interpose between Adam and Abraham. I cannot repress the hope, however, awakened by the sanctions of my own slender knowledge of the biblical language, that thorough and unprejudiced Hebrew scholarship will find satisfactory ground to accept Mr. Crawford's theory. Such a result, whatever the opposite conclusion may signify, would greatly strengthen the claims of the Pentateuch upon the devout credence of intelligent minds.

CHAPTER XXIX.

PREADAMITISM IN LITERATURE.

THE reader will be interested, before leaving this subject, in a few notes on some phases of opinion expressed by other writers. Like the conception of the secular length of the "days" of Genesis, the doctrine of Preadamites was a direct outgrowth of biblical interpretation. As Augustine, one of the church Fathers, educed from Genesis the idea of æonic creative days, so Peyrerius, a Dutch ecclesiastic, first conceived that certain passages of St. Paul's Epistles clearly imply the existence of races before Adam.

In 1655 a small book appeared in Paris which had for its theme the novel and alarming subject of Præ-Adamites. Its full title, translated from the Latin, in which the work was written, is as follows: *Præ-Adamites, or a Treatise on the Twelfth, Thirteenth and Fourteenth Verses of the Fifth Chapter of the Epistle of Saint Paul to the Romans, from which it is concluded that the First Men existed before Adam.** The book appeared anonymously; and those acquainted with the spirit of the dominant ecclesiasticism of that date will readily divine the motive of the author. It soon became known, however, that the world was indebted for this brochure to the pen

* *Præ-Adamitæ, sive Exercitatio super Versibus duodecimo, decimotertio et decimo-quarto, capitis quinti Epistolæ D. Pauli ad Romanos, quibus inducuntur Primi Homines ante Adamum conditi.*

and courage of La Peyrère, a learned and sagacious priest of the orthodox faith.

The work was an attempt to prove, from biblical authority, that men must have lived on the earth before Adam. Within a year appeared its complement from the pen of the same author, in which the whole subject was newly argued, and more thoroughly discussed. This was a *Theological System, based on the Hypothesis of Præ-Adamites.** The two works may now be found occasionally, vellum-bound, in one volume, 18mo, and published, without place, "anno salutis MDCLV."

The next year a book appeared in London with the following title: *Man before Adam, or a Discourse upon the Twelfth, Thirteenth and Fourteenth Verses of the Fifth Chapter of the Epistle of Paul to the Romans. By which are prov'd that the First Men were created before Adam.* This work, in its argument as well as its title, is substantially a reproduction of Peyrerius. It embodies, however, the *Systema Theologicum* under the single title of the first work.

In the undeveloped stage of scientific inquiry existing two and a quarter centuries ago, it is certain that no investigation respecting preadamites could have been conducted on true anthropological principles. In Europe the Bible was the source and criterion of all belief. Whatever the ecclesiastical authorities had accepted and sanctioned was held to be taught in the Bible. Whatever the ecclesiastical authorities did not understand the Bible to teach was generally regarded as unimportant, if not heretical. The meaning of the Bible, however, was extracted in accordance with the simple and narrow canons of grammar. No light was

* *Systema Theologicum ex Præadamitarum Hypothesi. Pars Prima.*

admitted from the luminous realm of God's universal truth. There are doctors high in authority among us at this day who maintain that grammatical structure and Hebrew usage are sufficient to light the way to the meaning of the darkest passages of Revelation. But the scriptural writers have sometimes plunged into the midst of the profound and mysterious facts of science; why not, then, summon *all our knowledge* to the task of evoking the meaning of the text? I maintain, against the narrow and pernicious dogma that the Bible is sufficient everywhere to interpret itself, that, on the contrary, it was ordained to be interpreted under the concentrated light of all the learning which has been created by a God-given intelligence in man. I believe the biblical documents, so far as dictated by inspiration, have been written for all time; and that their meaning is often so deep and so rich that the accumulated learning of the latest generation of men will be unable to exhaust it.

The pretense that the Bible must be interpreted grammatically and Hebraically, without scientific aids, is an implicit denial of its divine inspiration, and is one of those self-destructive claims which a blind faith is ever setting up against the demands of common sense. If the Bible is a purely human production, then we must seek its meaning by the literal interpretation of its language. We have no right to seek for anything beyond that which is actually expressed. If the Bible is the expression of an infinite mind, through finite, fallible, and often unconscious human agents, it is certain that the literal phrase can seldom rise to the full idea which it adumbrates. There is always something beyond — an infinite something beyond — which the language but faintly shadows forth, or fails totally to reach. This something beyond — this test and pre-

rogative of inspiration—is in the realm of universal and eternal truth; and there is nothing which can bring us into apprehensible relations to this which eludes verbal expression, except *attainable related truth.* Whatever aids, therefore, bring us into possession of truths correlated to those expressed, or faintly shadowed, or sublimely subsumed in the text of the divine revelation, it is not only legitimate but our bounden duty to summon. The more devotedly we hold to the inspiration of the Bible, the more devoutly shall we recognize the atmosphere of thoughts which transcended all power of expression in the language of a rude age, and the more gladly shall we seek to rise to the highest summits of modern thought, for the purpose of catching glimpses of the divine light which had not risen on the Hebrew mind.

If the coördinate relations of secular and revealed learning are not yet duly appreciated, they certainly had not been discovered in the age of Peyrerius. His general position was denounced as heretical; and the poor victim of a consciousness of inherent intellectual liberty was well-nigh submerged by a torrent of ecclesiastical choler. Denunciation, malediction, ridicule and defamation,—these were the unanswerable arguments which the "defenders of the faith" employed to forestall conviction awakened by sober and rational argument. They succeeded, as they had habitually succeeded. "*Pars secunda*" of the *Theological System* never followed *pars prima*; and the work of honest Peyrerius was left to be remembered and mentioned only as the impious madness of one of the enemies of religion.

Peyrerius, nevertheless, was less impious and mad than the bond slaves of dogma who silenced his tongue. His sagacity surpassed his age; and I have come,

not to bury, but to honor him. His thesis was argued with soberness, candor and logic; and the slender secular evidence with which the state of contemporary learning enabled him to fortify his exegesis was pertinent and legitimate. I conclude this notice of him by presenting concisely a statement of the principal points made in his works.*

1. The "one man" (Romans v, 12) by whom "sin entered into the world was Adam"; for in verse 14 that sin is called "Adam's transgression."

2. "Transgression" is a violation of "law"; therefore "the law" (verse 13) signifies the law given to Adam,—natural law, not that given to Moses.

3. The phrase "until the law" (verse 13) implies a time before the law,—that is, before Adam; and as "sin was in the world" during that time, there must have been men in existence to commit sin.

4. The sin committed before the enactment of the natural law was "material," "actual"; the sin existing after Adam, and through him, was "imputed," "formal," "legal," "adventitious," and "after the similitude of Adam's transgression."

5. Death entered into the world before Adam, but it was in consequence of the imputation "backwards" of Adam's prospective sin;† and this was necessary, that all men might partake of the salvation provided in Christ.‡ Nevertheless, death before Adam did not "reign."§

6. Adam was the "first man" only in the same

* See *McClintock and Strong's Cyclopædia*, art. "Preadamites."

† "Peccatum Adami fuisse retro imputatum primis hominibus ante Adamum conditis."

‡ "Oportuerat primos illos homines peccavisse in Adamo, ut sanctificarentur in Christo."—*Præadamitæ*, cap. xix.

§ "Peccatum tunc temporis erat mortuum; mors mortua, et nullus erat sepulchri aculeus."—*Ibid.*, cap. xii.

sense as Christ was the "second man"; for Adam "was the figure of Christ." (Romans v, 14).

7. All men are "of one blood," in the sense of one substance — one "matter," one "earth."* The Jews are descended from Adam; the Gentiles from Preadamites.† The first chapter of Genesis treats of the origin of the Gentiles; the second, of the origin of the Jews.‡ The Gentiles were created aborigines, "in the beginning," by the "word" of God, in all lands; Adam, the father of the Jews, was formed of "clay," by the "hand" of God.§ Genesis, after the first chapter, is a history, not of the first men, but of the first Jews.‖

8. The existence of preadamites is also indicated in the biblical account of Adam's family, especially of Cain.**

9. Proved, also, by the "monuments" of Egypt and Chaldæa, and by the history of the astronomy, astrology, theology and magic of the Gentiles,†† as well as by the racial features of remote and savage tribes, and by the "recently discovered parts of the terrestrial structure." ‡‡

10. Hence the epoch of the creation of the world

* We can now add that all men are "of one blood" physiologically and structurally and chemically; for among all the races of men the blood presents the same assemblage of characters. Moreover, we are able to assert that all men are of one blood genetically; so that whatever the thought intended to be expressed, the doctrine of Preadamitism does not collide with it.

† *Systema Theologicum*, lib. ii, cap. vi–xi.

‡ *Ibid.*, lib. iii, cap. i, ii.

§ *Ibid.*, lib. ii, cap. xi.

‖ *Ibid.*, lib. iv, cap. ii.

** *Ibid.*, lib. ii, cap. iv.

†† *Ibid.*, lib. iii, cap. v–xi.

‡‡ *Ibid.*, *Proœmium.*

does not date from that beginning commonly figured in Adam.*

11. The deluge of Noah was not universal, and it destroyed only the Jews; † nor is it possible to trace to Noah the origins of all the races of men. ‡

Peyrerius seems to have reached sound conclusions by a species of intuition; for it is not true that all these points are adequately defended from a secular position; nor was it possible, at that date, to give them such defense. The reader will be surprised, with me, that the brief summary above given directs attention to so many of the considerations which have been employed in the present work. The positions which, in the time of Peyrerius, were regarded as unscriptural, but which I am now prepared to defend on scriptural as well as scientific grounds, and which, moreover, are mostly accepted by the modern church, may be usefully summarized as follows:

1. The existence of preadamites, who lived under the reign of natural law.

2. The unity of mankind is expressed in the identity of their organization, and in their common psychic nature, instead of their common descent from Adam.

3. The biblical history of Adam's family implies preadamites.

4. The existence of preadamites is proved by the monuments of Egypt and Chaldæa.

5. It is proved by the developments of geology, biology and other physical sciences.

6. It is proved by the great racial divergences which exist among men.

* "Videtur enim altius et a longissime retroactis seculis petendum illud principium." (*Ibid.*, *Proœm.*)

† *Ibid.*, lib. iv, cap. vii–ix.

‡ *Ibid.*, lib. iv, cap. xiv.

7. The world's commencement dates back to very remote ages before Adam.

8. The deluge of Noah was restricted to the regions then occupied by the Jews.

The doctrine of Preadamites, so far as I have learned, passed into disesteem, and was only mentioned as a curious relic of opinion, until the bright glare of recent science forced attention to the crudities and impossibilities of the traditional belief. Preadamitism was maintained by Bory de St. Vincent and by Hombron. Mr. W. F. Van Amringe took up the defense of Preadamites in a work entitled *Outline of a New Natural History of Man founded upon Human Analogies*, New York, 1848. Speaking of the incompleteness and obscurity of the Mosaic account of the creation of man, he asks, "Whence came Cain's fear that some one, finding him, should slay him, if the only persons living at the death of Abel were Adam, Eve and himself? And why the reply of the Lord that 'whosoever slayeth Cain, vengeance shall be taken on him seven-fold'? And whence the necessity of putting a mark on him? Surely, his father and mother and their descendants would not have killed him! The departure of Cain, his marriage, the birth of his son Enoch, and his building of a city, took place before the birth of Seth, the next human being, according to Moses. The intermarriage of the 'sons of God' with the 'daughters of men' was the cause of the wickedness punished by the Flood. There were also 'giants in the earth in those days,' who cannot be referred to Cain as their progenitor, because four generations from Cain are mentioned among whom there were no giants; and these are sufficient to cover the whole intermediate time" to the Epoch of the Flood (page 57). All these circumstances point

to a race of men independent of Adam. Even though all the descendants of Adam, except Noah and his family, had perished in the Flood, there may have been other men, in parts of the earth not reached by the Noachian deluge, who escaped.*

The question of preadamites arrested the attention of Sir David Brewster. "It is possible," he says, "that preadamite races may have inhabited the earth simultaneously with the animals which characterize its different formations. But, though possible, and to a certain extent available as the basis of an argument against a startling theory, we do not admit its probability. Man, *as now constituted*, could not have lived amid the storms and earthquakes and eruptions of a world in the act of formation." (*More Worlds than One*, page 65). The objection is based on a condition of things which terminated long before the Epoch of Adam.

The most important work hitherto published on this subject appeared anonymously in 1857, in Edinburgh, under the title of "The Genesis of the Earth and of Man," with an introduction and an endorsement by the distinguished Egyptologist and chronologist Reginald Stuart Poole, of the British Museum.† This work is written with a reverent recognition of the authority of Sacred Scripture, but seeks to attain the

* S. Kneeland, Jr., in Hamilton Smith's *Natural History of the Human Species*, p. 72.

† *The Genesis of the Earth and of Man; or, the History of Creation and the Antiquity and Races of Mankind, considered on biblical and other grounds*, edited by Reginald Stuart Poole, M.R.S.L., etc., of the British Museum. Second edition, revised and enlarged. London and Edinburgh, 1860.

This is the work referred to in chapter xii. It has been received, after considerable research, since that chapter went into the printer's hands.

original, and even the primitive, meaning of the terms of Scripture. At the same time it recognizes manfully all the exigencies created by the advance of modern science, and discovers in a corrected interpretation of certain portions of Genesis a means of maintaining complete harmony between Genesis and science, and effecting, indeed, a more literal construction of the Sacred Text. Unhappily, however, the work is written in a lumbering eighteenth-century style, encumbered with parentheses, and weighed down with dependent clauses and piled-up and incongruous adjuncts which create obscurities and weariness in the reading.

After the first chapter, which is devoted to "The Genesis of the Earth," the author takes up "The Genesis of Man." He examines first the apparent indications in the Bible that all mankind originated from a single pair, and then discusses those passages which seem to be incompatible with such an understanding. He concludes that Scripture teaches the existence of men before Adam, and that Adam was only "the first individual of a new variety of a species which had universally sinned, but not become extinct" (page 46). This new variety, however, he holds to have been miraculously introduced. Thus mankind are derived from *two distinct* origins.

It is from this portion of the work that I have quoted in chapter xii. The author, as there indicated, considers the expression, "the sons of God," to refer to nonadamites; but, as the plural is employed, he thinks it means "the sons of the gods"—the devotees of polytheistic heathenism. I venture to renew my suggestion of a different conception. The plural *Elohim* is elsewhere, in the early part of Genesis, admitted to signify "God" as recognized by the He-

brews, and it seems most likely to demand the same rendering in this place. The nonadamites are therefore styled the "sons of God" simply because no other genealogy was known. The passage, accordingly, in Job i, 6, and ii, 1, may be thus paraphrased: "There was a day when the nonadamites came to oppose themselves to the Lord [of the Hebrews], and Satan aided them." It was an attack of heathenism against Hebrew monotheism.

The author shows in this chapter special familiarity with Semitic languages, and by numerous citations from the Bible succeeds in presenting a strong and just case. The chapter may be specially commended to exegetical students. Incidentally the geographical limitation of the Noachian deluge is asserted and maintained on scriptural ground. It was a Mesopotamian event, intended for the destruction of Adamites, but not including the posterity of Cain, or of the daughters of the Adamites who intermarried with the nonadamic "sons of God."

The author next proceeds to "physical observations." After discussing the phenomena of geographical distribution of lower animals and of man, and the results of racial intermixtures, he points out the archæological and historical proofs of the early differentiation of race-types, and concludes that the economy of Nature implies a succession of human varieties proceeding from the lowest to the highest. He holds that the production of the lower types from the rank of Adam would never take place in any length of time (page 109); that the production of Adam's type from the lowest would require too much time for belief, and that therefore we have the presumption that Adam was *created* the representative of a new race. He thinks the Negro is

the primitive variety of the human species (page 122); that he appeared in the upper valley of the Nile and spread thence all over Africa and Asia (page 161); that the Hottentots, on the one hand, and the Chinese on the other, are the temperate-zone derivatives of the Negro, while other Mongolians descended from the Chinese, and the Malays from a mixture of Mongolians and Nigritians. The Negro, probably, appeared first in a single pair or two, brought into being by a special creation, as the Adamic pair were long afterward created to stand at the head of the Mediterranean race.

In a chapter of "chronological observations," it is maintained that geological indications establish a high antiquity for European man. This position I have contested in chapter xxvii. Geologists and anthropologists, since 1860, have reached, with great unanimity, a more moderate estimate of the significance of the flint-bearing gravels of the Somme, and the bone-enclosing lavas of central France. It seems probable that the author himself would now concur in the general verdict. But this result, as I have argued, does not establish the low antiquity of *primeval* man.

As to biblical chronology, the author prefers that of the Septuagint, as affording the least possible time compatible with the facts of ethnology — even assuming Adam a special origination. The numbers in Genesis, on which chronology is based, were purposely altered, he says, by the later Jews, and probably also by the earlier, if not first inserted by them (page 146–7).* Egypt was settled long anterior to the

* Compare the similar statement in the article on "Preadamites," in *McClintock and Strong's Cyclopædia*, and the editor's brusque contradiction.

Hebrew date of the Deluge; and the Septuagint, though quite uncertain, barely allows the length of time demanded by the facts of history and ethnology.

Under the head of "historical observations," he asserts that the Egyptians possessed a considerable admixture of Negro blood; and in proof cites the tumid lips and languid eyes, as well as the complexion. He claims for them, also, a scanty beard, and hair "extremely crisp" (!) He opposes these conclusions to the evidence *not only of iconographs, but of mummies*, since "many of these are Greek and Roman, or from far remote countries whence the Romans drew their foreign legions, or from Asia or Ethiopia" (page 169). These pretensions are certainly indefensible. Other evidences of Negro admixture he finds in the religion of the Egyptians, instancing various grades of superstition, ranging from fetichism through animal worship and Shamanism, and also the doctrine of metempsychosis. All these superstitions he considers mingled with the reception of truths derived from a primitive revelation to the ancestors of the Egyptians. But when we ascertain what truths are regarded thus the product of revelation, we find they constitute only that body of religious ideas and conceptions which have been shown to be the common inheritance of humanity. Further evidence of Negro admixture he discovers in the Egyptian language. Now, while we need not deny such a degree of admixture as history and ethnology have always displayed along the boundaries of coterminous races, it must be denied that the author has established such a racial interfusion as he has deemed essential to sustain his assumption of an African primordiality for humanity.

A similar infusion of Negro blood is thought to be

manifest in the races of India, whose primitive inhabitants are alleged to have been Negroid, with dialects of the Turanian stock (page 188).

As to philology, he holds that the Egyptian language was formed partly of Semitic elements and partly of Hamitic, and that among the latter were Nigritian elements. The Japhetic or Iranian stock is deduced from Turanian, which, like the Nigritian, descended from some monosyllabic stem. As to the origin of the Semitic, he affirms that it was not derived directly nor mediately "from a rude primeval form of speech" (page 207); but that, clearly, it was originated by Adam and Eve, or else communicated by revelation (pp. 244, 268). In assuming these positions, he makes issue with Bunsen and Max Müller, whose opinions as to the derivation of European and Asiatic languages from one stock have been sustained by philological researches of later date than the work under notice. Common primitive elements in the Egyptian, Semitic and Hamitic languages should be expected from the common origin of the Noachian languages from an antediluvian Adamic form of speech, based on the preadamic Turanian. Hence a primitive Assyro-Babylonian Accadian which, while it was the predecessor of the widespread Hamitic type, retained Turanian reminiscences. Hence the linguistic cousinship of the Semitic and Hamitic forms of speech, whether as developed in Mesopotamia, Canaan, Egypt or Ethiopia.

The work, while fundamentally sound, is pervaded by some serious misconceptions and errors, which lead the author, especially in the philological chapter, into strained and complicated adjustments of facts. The central error consists in the purely gratuitous assumption that the Negro was the primitive type of

humanity, and was dispersed over the world from the upper valley of the Nile. Accessory to this is the assumption of substantial identity of race between the Negroes and the black-skinned tribes of south Africa, Australia, Tasmania, Papua and the Philippines; as also the assumptions of mixed race, mixed religion and mixed language for the Egyptians, a miraculous communication of the Semitic parent language to Adam, and the non-recognition of an Asiatic Ethiopia.

Mr. Poole, in his introduction to the work, gives the author's positions a general endorsement. Among particulars enumerated for approval, besides the central doctrine of Preadamitism, is the ascription to a primitive revelation of the higher doctrines of the Egyptian religion (p. ix); the demand for a remoter origin of our species than Hebrew chronology allows (p. xvi); the high antiquity of European man (p. xvii); the assertion of two independent origins of mankind, and two primitive sources of human language (p. xviii); the recognition of the mingling of the streams from these sources in the Egyptian language (p. xx), and finally, a deprecation of "dogmatism or flippancy" in dealing with the questions raised.

A writer in the *Evangelical Quarterly Review*, in 1866, takes up the subject of Preadamites; and another, in October, 1871, in *Scribner's Monthly*, writes in answer to the question "Was Adam the First Man?" The article is based on the work next mentioned.

A work of much interest, written in pleasing style, and one which has elicited some critical comment, is thus entitled: *Adam and the Adamite; or, the Harmony of Scripture and Ethnology.* By Dominick M'Causland, Q.C., LL.D. Third edition, London, 1872, 12mo, pp. 328. Dr. M'Causland main-

tains the general thesis of Preadamitism. He holds that the inferior races possess a higher antiquity than the superior races, and that a racial degeneracy from the superior race would not be in accordance with the lessons of history, or the observations of science. He denies, however, all derivative relation between the races, and defends, accordingly, the doctrine, now generally abandoned, of distinct human origins, each taking place through a distinct creative act. He rejects, therefore, the theory of the derivative origin of mankind, and pronounces the doctrine of evolution in general to be unsound. From Adam and Noah, in accordance with the general tenor of vital phenomena, an upward tendency has been generally experienced. It is his idiosyncrasy to maintain that the shepherd kings of Egypt and their people emigrated to western America.* Another opinion, not new, but equally lacking in evidential support, represents Cain as imparting the germs of a civilization to the Chinese among whom he settled.† This theory, as I have already shown, is quite in accordance with all our knowledge, though it cannot be said that we have any direct proof in its support. I have already stated that the author of *The Negro* holds the Mongoloids to be a hybrid or mulatto race resulting from the union of Cain with the negresses of central Asia. Finally, it is maintained by M'Causland, with much reason, that the deluge of Noah was especially a Hebrew phenomenon, instead of a universally destructive cataclysm. In his later work, *The Builders of Babel*, (London, 1871, 12mo, pp. 339,) the last chapter is devoted to *The Adamite*, in which similar views are summarized.

* See quotation and criticism, p. 385.

† *Op. cit.*, pp. 196–198, 266. This opinion is indicated by the author of *Genesis of the Earth and of Man.*

Dr. D. D. Whedon, in reviewing this work, seems to incline toward M'Causland's general position, though suggesting a more eligible means of meeting some supposed scriptural difficulties.* He seems to be urged toward the admission of preadamites by the pressure of the evidence, then felt, toward a conviction of the high antiquity of the human species. In a later critical notice, referring to this one, he says: "We expressed the opinion that if science compelled the concession of the immense antiquity of man, his [M'-Causland's] theory was preferable to any other view, inasmuch as, unlike all others, it only required a different interpretation of certain texts, but no violation of the text itself. . . . Since our expressing this view, however, the argument for man's geological antiquity has weakened rather than strengthened." †

As to the tenability of the ground on which assent is partially withdrawn from the theory of Preadamitism, it is good in the sense intended, but bad in the sense which the language expresses. The discussion on human antiquity, to which Dr. Whedon alludes, and of which he had become wearied, refers to the Epoch of the Stone Folk of Europe. I have already given my reasons ‡ for denying their high antiquity. But this does not concern the antiquity of the *first* men; and, therefore, it does not relieve the *pressure for time* which brought Dr. Whedon to the awful brink of Preadamitism. In a still later review he seems willing to yield when the evidence becomes a little more urgent. "Why not accept, if need be," he asks, "the preadamic man? If Dr. Dawson admits an Adamic center of creation, why not admit,

* See Dr. Whedon's comments cited on p. 286.

† Whedon, in *Methodist Quarterly Review*, July 1872, p. 526.

‡ See chapter xxvii of the present work.

if pressed, other centers of human origin? The record does not seem to deny other centers in narrating the history of this center."* This is all true; but we have a more comfortable way of reaching this admission. It suits the facts better to assume one original center of human origin, and one Edenic center, to which man arrived by continuity, and not by a new creation; and this assumption, it seems to me, fits much better the other exigencies of the Sacred Text. Finally, in concluding a critical notice of the present writer's little work entitled *Adamites and Preadamites*, Dr. Whedon — as if in mockery of our serious efforts to convince him — closes the door on us with this terse decision: "On the whole, we do not yet quite accept the preadamite!"† I am sure the Doctor will extend a hand to him as soon as convinced he is not a phantom.

Dr. J. P. Thompson, in his work entitled *Man in Genesis and Geology* (New York, 1875, 12mo, pp. 149), after referring to the typical character of Seth, Noah and Abraham, continues: "Now, some would apply this obvious principle of selection in the early biblical history to the case of Adam, and regard him, not as strictly the first man created, and the sole progenitor of the human race, but the first called to a representative position as the Son of God, and the head of a new type of humanity. . . . Some plausible arguments are urged for this opinion. . . . Such is the theory; and although open to some serious objections, it serves to show one *possible* way in which the Bible and Science may yet be harmonized upon

* Whedon, in *Methodist Quarterly Review*, April 1878, p. 369.
† Whedon, in *Methodist Quarterly Review*, July 1878, p. 567.

the question of the antiquity of man and the unity of the race." *

The positions assumed in the work here brought to a conclusion may be summarized as follows:

1. The Biblical Adam was a representative of the Mediterranean race, and was simply the remotest ancestor to whom the Jews could trace their descent.

2. The Bible itself clearly implies the existence of nonadamites.

3. Races remote from Palestine in Genesiacal times could not have descended from the Noachite stock, because the dispersion of the Noachites existing in Genesiacal times extended over only a very limited area.

4. The lower races could not have descended from the Mediterranean stock, because

(1) A vast diversification of races now exists.

(2) Some of these races are greatly inferior to the Mediterranean.

(3) A complete differentiation of races existed in the early dynastic periods of Egypt.

(4) And the chronological position of Noah, or even of Adam, is far too recent to suppose the differentiation began at the Noachic, or even the Adamic Era.

(5) And further, the theory of the Hamitic origin of the Negroes is opposed by the Bible itself.

(6) Finally, the supposition of a universal degeneracy of all human races is scientifically inadmissible.

5. The doctrine of Preadamitism is entirely consonant with all the fundamental principles of Biblical Christianity.

* J. P. Thompson, *op. cit.*, pp. 106–7.

The conclusions of the strictly scientific discussion in the sequel may be thus stated:

1. A chain of profound relationship runs through the constitution of all the races, and they may be regarded as genealogically connected together.

2. The initial point of the genealogical line may be located in Lemuria.

3. An early and profound split in the primitive stock is represented by the prognathous, wooly-haired, or African types, and the mesognathous, straight and curly-haired, or austro-oriental types.

4. The African stock entered the continent somewhat north of the equator, and dispersed thence southward and westward.

5. The smooth-haired stock sent one divarication toward Australia, and another toward central Asia. From the latter have proceeded all the Mongoloids, in due succession; and from the former the Dravidians.

6. The Adamites are an offshoot from the Dravidians, and showed, at first, a closer approximation to the older type than is preserved in the Mediterranean race at present.

7. An early branch of the Mongoloid stock turned westward, and occupied northern Africa, Atlantis and the greater part of Europe, in times anterior to the Kelts or the Pelasgians.

8. The first men were geologically preglacial, and their antiquity is comparatively great. It may reach a hundred thousand years. Prehistoric Europeans, so far as inductively known, were postglacial, and their antiquity cannot be carried, on archæological and ethnological grounds, beyond 5000 or 6000 B.C.

9. America was populated by two streams of Old World Mongoloids. One of these entered by the northwest, and produced the peoples of the "mounds" and

of the civilizations of Mexico and Peru; the other entered by Polynesia, and is represented by the warlike and ever-encroaching Indians of the hunting tribes.

The investigations thus summarized flow by a natural and interesting sequence from the doctrine of Preadamitism; but it must be distinctly borne in mind that the truth of this doctrine does not depend, to any extent, on the establishment of the ethnological conclusions to which it has pointed the way.

SUPPLEMENTARY NOTES.

1. *The Babylonian Adam*, p. 158.—In citing from the Babylonian "legend of creation" I overlooked the fact that tablet "K 3364" is one of those of which Mr. George Smith has given us a decipherment in "*The Chaldœan Account of Genesis*," p. 78 seq.

The legend to which this tablet belongs has a further interesting bearing on the question discussed in the present work. The following comments are from the work cited (pp. 85, 86): "The race of human beings spoken of is the *zalmat-qaqadi*, or dark race, and in various other fragments of these legends they are called *Admi* or *Adami*, which is exactly the name given to the first man of Genesis (*Preadamites*, pp. 159, 195). The word Adam, used in these legends for the first human being, is evidently not a proper name, but is used only as a term for mankind." The remarkable occurrence of names so nearly identical in the literatures of the Hebrews, Babylonians and Indians, see p. 407, (*Ad* was the reputed father, also, of the primitive Arabians,) to designate the first representatives of man, in a certain sense, is almost demonstration that the three legends had a common origin and refer to the same events; and the fact that the name was employed by the Babylonians in an ethnic rather than individual application, implies that it is so to be understood in Hebrew history. (Compare the views expressed on p. 408.)

Mr. George Smith continues: "It has already been pointed out by Sir Henry Rawlinson that the Babylonians recognized two principal races, the *Adamu*, or dark race, and the *Sarku*, or light race, probably in the same manner that two races are mentioned in Genesis, the sons of Adam and the sons of God. It appears incidentally from the fragments of inscriptions, that

it was the race of Adam, or the dark race, which was believed to have fallen; but there is at present no clue to the position of the other race in their system." The characterization of the Adami as a dark race is quite in accord with the biblical description of Adam. There may be a wide difference between "dark" and "black." A dark color may easily be the ruddy, sun-burnt tint attributed to the biblical Adam, and known to characterize the Hamites. The identification of the *Sarku*, or light race, presents difficulties. I am inclined to dissent from the intimation that they answer to the genesiacal "sons of God." These, as I have maintained (pp. 194, 463), were not Adamic, and consequently were not light colored. I venture the conjecture that the "dark" race (in some passages "dark races") embraced the Hamites and the Semites, while the *Sarku* were the white Japhetites bordering the dark races on the north. It may even be that the dark non-Adamites were grouped, in a color-classification, with the Hamites and Semites, without implying a belief in any common Adamic descent. It is said to have been a dark race which fell, but if the white race sprang from the dark, it would inherit the moral taint which entered the blood of the original offender.

2. *Physical character of Australians.*—I have already intimated (p. 251) that reliable observers ascribe a better physical endowment to the normal Australians than was formerly attributed to them (Fig. 12, p. 73), and thus depict them as worthier to be the ethnic parents of the Dravida and grandparents of the Adamites. Dr. Pickering describes them as well formed and athletic. A fresh testimony to the same effect comes from Mr. Alexander Forrest, who has very recently completed a tour of exploration in northwestern Australia. He reports that in the region between the Fitzroy and Victoria rivers great numbers of the natives were seen, and for the greater part they were fine, large men, who had evidently never met Europeans before (*Zeitschrift der Gesellschaft für Erdkunde zu Berlin*, 1879, p. 436; *American Naturalist*, xiv, 309, April, 1880).

3. *Americans and American Civilization*, chapters xx and xxiv.—When the chapters of this work relating to American Aborigines were placed in the printers' hands, I had not seen the important work of Professor John T. Short, entitled *The North Americans of Antiquity, their Origin, Migrations and Type of Civilization*, New York, 1879. This circumstance is to be regretted. It adds, however, to the interest of the conclusions in which I find myself in accord with Professor Short. The most noteworthy of these are the following: 1. The mound-builders were not red Indians (compare pp. 341, 343); 2. They were related to the Nahuas of Mexico (compare pp. 333, 339); 3. Man is not autochthonous in America (pp. 397 seq.), and American civilizations do not attain a high antiquity; 4. The ancient Americans were not a single race, as maintained by Morton (pp. 338, 343). See summary by Prof. O. T. Mason in *American Naturalist*, xiv, 297, Apr. 1880.

In this connection may be cited at once the most thorough and the most sumptuous work on ancient Peru which has ever appeared: Charles Wiener, *Pérou et Bolivie, Récit de voyage suivi d'études archéologiques et ethnographiques, et de notes sur l'écriture et les langues des populations indiennes; Ouvrage contenant plus de 1100 gravures, 27 cartes et 18 plans;* Paris, 1880.

The following additional sources of information may be consulted: A. J. Conant, *Footprints of Vanished Races in the Mississippi Valley.* Illust., 8vo, St. Louis, 1879. On the origin of American animals and people, Prescott, *Conquest of Mexico*, Vol. III, Appendix, pt. i, and the references there given. On the origin of American civilization, Prescott, *Conquest of Peru*, Vol. I, p. 164 seq. and references.

4. *Northern Connection between Americans and Asiatics*, pp. 398–400.—An elaborate paper bearing directly on the possibility and reality of extensive communication between America and the northern parts of Asia has been published by Charles Wolcott Brooks, entitled *Japanese Wrecks, stranded and picked up adrift in the North Pacific Ocean, ethnologically*

considered, as furnishing evidence of a constant infusion of Japanese blood among the Coast Tribes of Northwestern Indians. California Acad. Sci., 1876. Sixty instances of Japanese wrecks are enumerated, and imperfect information exists of many others. From many of these, Japanese sailors have found their way to American shores.

5. *American origin of Chinese.*—I have alluded to the theory of an American origin for Old World populations (p. 385). Mr. Charles Wolcott Brooks has advanced this theory in a paper entitled *Origin of the Chinese Race. Philosophy of their Early Development, with an Inquiry into the Evidences of their American origin, suggesting the great Antiquity of Races on the American continent*, Proc. Cal. Acad. Sci., 1876. The argument is grounded on ethnic affinities, some apparent linguistic resemblances (see *Otomi*, p. 391), and the existence of the return current of the *Kuro Siwo* from the American coast.

INDEX.

Aben Ezra, cited, 195.
Abimaël, 33.
Abraham in Egypt, 133; posterity of, 418.
Abusimbel, temple of, 201, 206.
Abydos, tablet of, 113; new tablet of, 113.
Abyssinians, 186, 239.
Accad, 19, 133, 135, 448.
Accadian language, 36, 138, 348, 409, 467; dynasty at Babylon, 128, 140; civilization, 263.
Achæans, 45, 49.
Acosta J. cited, 394.
ÂDâM as a word, 159, 195, 293.
Adam, two conceptions of, 7, 191, 242; time important in identification of, 8, 445, 464; epoch of, 105, 212; a white man, 158; Babylonian legend of, 158; as characterized in the Bible, 159; the remotest ancestor of Hebrews, 191, 408; represents a superior specimen, 193; sin of, 287; not a primitive man, 294; claimed as a new creation, 464;
ADâMâH, 160, 195.
Adamites, see Mediterraneans.
Adams of other races, 158.
Adhémar J. cited, 431.
Adima, 361, 407.
Admah, 134.
Æschylus, cited, 145.
Aëta, 77; low condition of, 267, 298; characterized, 311; one of portrayed, 78.
Æthiopia, a Greek word, 91; rivers of, 93; where located, 17, 28, 29, 90, 91.
Æthiopian Dynasty, 200.
Affiliated classification of mankind, 302.
Afghans, 44, 186.
Africa, characters of, 258; productions of, 259; relations of, to civilized countries, 263.
Africans, Dr. Whedon on, 228; great diversification of explained, 237; influence of hybridism on, 237.
Agassiz, cited, 87, 184, 250, 384.
Age, how expressed in Hebrew, 451.
Age of the world, 4, 5.
Ages, of antediluvians, 3, 5, 102, 227, 452; table of, 103; among sundry peoples, 452.
Agriculture in Egypt, 26.
Aimaq or Hazara, 374.
Aïnos, 62, 86, 143, 150, 298, 311, 314, 365, 376; one of, portrayed, 63.
Albert lake, 259.
Albino, 350.
Albuquerque, 280.
Ale-uts, resemblance of, to Japanese, 68, 323, 325; classed with Eskimo, 321, 344; antiquity of, 325; type of, stretching southward, 330.
Algerians, 27.
Algonkins, 342, 389, 396.
Allophylians, 137, 150.
Almodad, 32.
Almodœei, 32.
Amalgamation, see Miscigenesis.
Amazonas, 395, 397, 403, 406.
America, physical characters of, 262.
Americans, 66; origin of, 384.
Amorite, 22.
Amputation of fingers, 309.
Amraphel, 133.
Amunoph II, portrait of, 203; portrait of mother of, 204.
Anahuac, 391, 394.

Anamese, 317, 371.
Anamin, 20.
Anatomical comparisons of races, 162.
Andaman islands, 76, 311.
Andrews E. cited, 439.
Andrews, Miss Luella, illustrations from, 316, 318.
Anglo-Saxon, 47.
Angola, 69.
Animals of Africa, 260; domesticated, 355.
Anshey, 190.
Antaradus, 22, 23.
Antediluvians, ages of, 3, 5, 450.
Anthropoid apes and Africans, 247, 248, 255; skeletons of, compared, 248, 250; portraits of, compared, 253; common descent of, not assumed, 255.
Antiquity of man, 230, 419; three aspects of, 419; of Stone Folk exaggerated, 421, 437; not preglacial, 422; some numerical results on, 442.
Antiquity of race distinctions, 188, 197; table of, 211.
Antisians, 186.
Apaches, 342.
Arabia, overspread by Hamites, 23.
Arabs, 79; of Joktanide family, 32.
Aradus, 23.
Aram, 34.
Aramæa, 34.
Aramæans, 34, 36, 137.
Ararat, 43, 295.
Arcelin, cited, 441.
Argives of Pelasgic origin, 25.
Argos, 26.
Argyll, Duke of, cited, 446.
"Ariel," on the Negro, 189.
Arioch, 133.
Aristotle, cited, 146.
Arkite, 22.
Arm, relative length of, 172.
Armenia, 34, 35, 39, 42, 43.
Armenians, 48, 79.
Arphaxad, 31, 88.
Aru islands, 75.
Arvadite, 23.
Aryan roots, with presemitic, 43; languages, 385.
Aryan streams of migration, 43.
Aryans, after Hamites, in Europe, 25, 379; established in Italy, 26; described, 53; summary of migrations of, 48; portrait of one of, 201.
Ascanians, 39.
Ashantees, 69, 258.
Ashkenaz, 39.
Asia Minor ravaged by Kelts, 46.
Aspect, physical, of Africans, 253.
Asshur, 19, 31, 135, 448.
Assyria primitively Hamitic, 20, 23.
Assyrians, 36.
Athabaskans, 342.
Atlantis, occupied by Mongoloids, 28, 378; occupied later by Hamites, 28; traditions of, 379; miocene, 382.
Atramitæ, 32.
Attu, 399.
Auk, Great, 434.
Auricular radii, 168.
Aurignac, 417.
Aurochs, 434.
Australian race, 53, 73, 313, 320; language, 74, 365; fauna, 307; region, 357.
Australians, one of, portrayed, 73; cranial capacities of, 163, 164, 246, 307; cephalic index of, 167, 168, 246; prognathism of, 171; length of arm of, 172; strength of back of, 175; smooth-haired, 187; brain of, 249; inferior to negro, 266; the lowest type, 307; faith of, 307; compared with Dravida, 313, 365; dispersion of, 363; represents primitive man, 412; one of, portrayed, 73.
Authority in matters of belief, 455.
Axenus or Euxine, 39.
Aymara language, 385.
Aymaras, 186, 337, 394, 405.
Aztecs, 334; migrations of, 392, 405.
Aztlan, 390, 393, 405.

Babel, 19, 135, 448.
Bab-el-Mandeb, 27.
Baber, Sultan, 375.
Babylonia primitively Hamitic, 20; date of monarchy in, 128.

Babylonians semitized, 36; overlying Turanians, 137.
Bactria, 43.
Bagaveda Gita, 361.
Baldwin, cited, 340.
Bancroft H. H. cited, 383.
Banguela, 69.
Bantu family, 69, 310, 367.
Barbary primitively Hamitic, 23.
Barber, cited, 387.
Barmian, 375.
Baron Dr. M. L., testimony of, 177.
Barth, cited, 70.
Barucchi, cited, 108.
Basilicate, 25.
Basques, 64, 150, 153, 378; a remnant of Iberians, 149; language of, 149.
Bastarnians, 47.
Beccari O., on palms, 360, 402.
Bechuans, 69.
Bedawees, 94.
Behring's family, 64; sea, 399; strait, as a passage-way to America, 385, 397, 404, 436.
Bela, 134.
Belgæ, 46.
Belourtagh, 295.
Beluchs, 44.
"Belzoni's tomb," 198.
BeNI signifies "posterity," 13.
Berbers, 20, 26, 237.
Bergsträsser, cited, 440.
Bessels E., illustration from, 65; on Pueblos, 341.
Beufey, cited, 410.
Bholan, 375.
Bhotan, 319.
Bhotiya tribes, 348.
Bible, text of, 8, 9; substance of, in our possession, 9; inspiration of, 457; unchronological, 106.
Biblical characterization of Adam, 160; language, 7; interpretation, 456; ethnography discussed, 16; limited in scope, 88.
Bickmore A. S. cited, 143.
"Big trees," 435.
Birch S. cited, 123, 124, 126, 127.
Birch S. on Negroes of Twelfth Dynasty, 207; of Eleventh Dynasty, 208.
Birds of New Zealand, 433; of the Mascarenes, 433.
Bishareen, 237, 239.
Bishop R. E., illustration from, 59, 173, 174; on plasticity of primitive races, 230.
Blackfeet, 342.
Black races, 68; strongly isolated, 156; without history, 157; prognathism of, 171; preadamic, 221.
Blakiston, cited, 143.
Bleek, cited, 71, 281.
Blonde family, 52, 53, 63, 162.
Blue Nile, 27.
Blumenbach, cited, 383.
Bochart, cited, 15, 17, 42, 97.
Bodshi, 371.
Boekh, cited, 47.
Bojesman family, 71; See Bushman.
Bokkara, 44.
Bolor, 295.
Boomerang, 74.
Borreby skull, 414.
Bory de St. Vincent, cited, 299, 461.
Botecudos, 268, 298.
Botta, cited, 198.
Boudinot E. cited, 385.
"Bounty" mutineers, 134.
Bowers S. cited, 387.
Brace C. L. cited, 143, 315; on prehamites, 139; on mulattoes, 179; misleading evidences used by, 180; on language, 241; on race degradation, 277, 280; on Todas, 348.
Brachycephalism, 152, 165, 246; in America, 338.
Brahmanic Aryans, 43, 407; religion, 44.
Brahui, 55.
Brains, weights of, in mulattoes, 83; convolutions of, 249, 250; weights of, compared, 249; embryonic development of, 250.
Brasseur de Bourbourg, cited, 340, 380, 386, 391.
Brazilians, 79, 395.
Breaks in palæontology, 234.
Bregmatic radius, 169.
Brewer W. H. cited, 427.
Brewster D. on cosmic redemption, 292; on preadamites, 462.

Briggs John, cited, 44, 350.
Broca P. cited, 149, 169, 250, 312.
Bronze age, 167, 442.
Brown races, genealogy of, 311.
Brugsch, cited, 19, 112, 443; on Egyptian dynasties, 114.
Brunette family, 52, 162.
Bruniquel, 417.
Bruttium, 25.
Büchner on Aëta, 267; on savages of Borneo, 267.
Buffalo of Africa, 260.
Bulgarians of the Danube, 64; of the Yenesei, 64.
Bulkley Col. cited, 323.
Bunda nations, 69.
Bunsen, cited, 18, 112, 113, 467; on biblical chronology, 107, 446; on Egyptian monuments, 110; on Egyptian dynasties, 114.
Burke, Luke, cited, 103, 108.
Burmese, 317, 371.
Buschmann, on languages, 333.
Bushman family, 71.
Bushman Venus, portrayed, 72; physiognomy of, 254.
Bushmen, 310; cephalic index of, 167; prognathism of, 171; language of, 241; paintings by, 256; relation of, to Australians, 367.

Cabrera, cited, 386.
Cain, 136, 469; descendants of, 162, 347; convicted of murder, 188, 295; wife of, 188; city of, 193; settled among preadamites, 295.
Calabria, 25.
Calah, 20, 135, 448.
Californian Indians, 185, 328, 329, 330, 333.
Calneh, 19, 133, 135, 448.
Cambrai and Cambrilla, 39.
Cambria, 39.
Camel, 260.
Canaan, 21, 225.
Canaanites semitized, 36; spread abroad, 226.
Canarese language, 56.
Canary islanders, Hamitic, 27, 28.
Capellini G. cited, 423.
Caphtor and Caphtorim, 21.
Cappadocians, 48.
Cara people, 394.
Caribs, 338, 397.
Cartwright Dr. cited, 177.
Cashgar. See Kashgar.
Casluhim, 21.
Caspari O. cited, 357, 363, 401, 423, 431.
Catlin, cited, 387.
Caucasians, 39, 150.
Cave animals, 432.
Cave dwellers of Europe, 145.
Caxamarquilla, 395.
Cecrops, 380.
Cephalic index, 165, 246; insufficiency of, 168; value of, 345.
Cereals, brought to Europe, 24, 44.
Cerebral substance, 172.
Chabas, cited, 443.
Chaldæa, primitively Hamitic, 23.
Chaldæan records contain Tatar elements, 48.
Chaldæan source of Hebrew traditions, 10.
Challenger, soundings from, 381.
Chalmers Dr. quoted, 291.
Champollion, cited, 112, 199, 203.
Chandana island, 76.
Changes since human advent, 436.
Charlevoix, cited, 389.
Charnay, cited, 387.
Chart of Dispersions of Noachites, 51; of Mankind, 361.
Chathramitæ, 32.
Chaulan, 33.
Chedorlaomer, 133.
Cheops, 204.
Cherokees, 343.
Cherubini, cited, 97.
Chibcha, 337, 394.
Chicasaws, 343.
Chichimecs, 340, 392, 393.
Chile, 395, 405.
Chilkaht-kwan, 326.
Chimal-a-kwe, 329.
Chinese, 40, 61, 314, 317, 323, 342, 345; migrations of, 355; records of, 437; claimed derived from Negro, 465; received Cainite civilization, 469; traditions of, 129; not primordial, 143; dispersion of, 371.

Chippewayans, 342.
Chiriqui, 394.
Choctaws, 343.
Chonos archipelago, 186.
Chorographic relations, 356.
Chromatic classification of races, 52.
Chronologers, Egyptian, of two schools, 109; long, 114.
Chronological epochs, 128.
Chronology accepted, examined, 211, 220, 446, 447.
Chronology, Chinese, 129, 130; Indian, 130; Phœnician, 130.
Chronology of Egypt, 109; sources of, 110; authorities on, 112; Era of Menes, 117; great discrepancies of, 117.
Chronology of Hebrews, 98, 446, 447, 453, 465; tables of, 98; great discrepancies, 104; affectation of precision in, 104; opinions on, 106, 108, 446.
Chuk-chi, 64, 322, 325.
Chuk-luk-mut, 322.
Chun, 130.
Cibola, 405.
Cilicians, 36.
Cimmerians, see Kimmerians.
Cingalese, 315.
Circassians, 40.
Civilization in America, 333, 386; probably indigenous, 388.
Clark A., on names in Genesis, 14.
Clark E. L. cited, 64.
Classification of races, 52, 298; table of, 299, 300, 302.
Clavicle in Negro, 171.
Cliff-dwellings, 340, 405.
Clovis, 122.
Coimbra, 39.
Colla, see Aymara.
Colle del Vento, 423.
Color as a taxonomic character, 185, 186, 298; of Tlinkets, 326.
Color-classification, 52, 185.
Columbia river, valley of, 384.
Columbus, 361.
Comanches, 333.
Congoes, 298.
Congo river, 259.
Connecting links between Australians and Negroes, 368.
Consequences, theological, 283.
Conspectus of types of mankind, 52.
Contemporary men, and extinct animals, 432.
Continuity, principle of, 269.
Contour lines, marine, 362.
Conway M. D. cited, 159.
Cope E. D. cited, 382.
Copper mining, 404.
Coptic Christians Hamitic, 26.
Corean dialects, 62.
Coreans, 143, 311; described, 318; origin of, 376.
Costa Rica, 394.
Cradle of mankind, 3, 354; search for, 355.
Crania, prehistoric, index of, 151, 167.
Cranial capacities, 162, 246, 273, 320.
Cranial index, see Cephalic index.
Crawford T. P., on chronology, 100, 105; on Chinese chronology, 130; on patriarchal periods, 449.
Creation, epoch of, in Bible, 99; various opinions on, 99; not a simple event, 105.
Crees, 342.
Crimeans, 39.
Croll J. cited, 403, 431, 432, 442.
Cro-Magnon skulls, 152, 167, 414.
Cross-heads, 246.
Cultural deterioration, 276; causes of, 276; examples of, 277, 280.
Cumberland, 39.
Cundinamarca, 394, 405.
Cuneiform characters, 36, 141; inscriptions, 44.
Curetes, 147.
Curse pronounced by Noah, 225.
Curtis R. cited, 281.
Cush, as a name, 17, 95, 227; translated Æthiopia, 91; country of, 17, 20, 27, 88; not in central Africa, 91; not the land of the Negroes, 94; rivers of, 93.
Cushim, 29.
Cushite dynasty at Babylon, 128.
Cuvier G., on Bojesman woman, 254.
Cyclopes, 146.
Cynetians, 149.
Cyprians, 36.

Cyprus, 41.
Czarnotski A. cited, 410.

Dahomey, 69, 257.
Dakotahs, 342.
Dall W. H. cited, 326; on Eskimo, 320, 389, 397; on shell-heaps, 325; on American ethnology, 383; on Ale-uts, 399.
Dalton, illustration from, 55, 60.
Damascus, 35.
Dana J. D. 403; on continental faunas, 356.
Danakil, 367.
Danaoi of Pelasgiote origin, 24.
Danaos, 26.
Dariel, gorge of, 43.
Darius Hystaspes, 38.
Dark complexions explained, 79.
Darwin C. cited, 86, 87, 403.
"Daughters of men," 189, 194, 295, 440.
Daunians, 25.
Davis B. cited, 320.
Davy, cited, 350.
De Bretonne, cited, 99.
Decandolle, cited, 403.
Deccanese, 187, 312, 407.
Dedan, 18.
D'Eichthal, cited, 258.
De Ferry, cited, 441.
Degeneracy of races denied, 269, 464, 472.
Degradation, structural, 274; cultural, 276; of certain Portuguese, 277; comments on account of, 279.
Dekapolis, 35.
De Laet, cited, 384.
Delamarre C. cited, 410.
De Lanoye, on age of Nile delta, 119.
Delitzsch, cited, 25.
Delta, Nilotic, age of, 119.
Delta of Mississippi, 440.
Deluge of Noah, 3, 5, 408; epoch of, 101, 102, 128; universality of, 105, 190, 215; universality of denied, 106, 154, 295, 460, 464, 469; no records of, preserved, 155.
Denise, man of, 424.
Dennis, on Etruscans, 25.
De Saulcy, cited, 18.
Desjardines, cited, 395.
Desmoulins A. cited, 184.
Detached tribes, 144.
Deteriorations partial and abnormal, 274.
D'Halloy O. cited, 410.
Digger Indians, see Californians.
Diklah, 33.
Dinkas, 70.
Diodorus Siculus, cited, 147.
Disappearing species, 435.
Dispersion of races, 354; from a central region, 355, 361; of Black races, 363; of Asiatic Mongoloids, 369; of Polynesians, 370; of Americans, 383.
Distinctions of races, zoölogical value of, 86; amount of, 156.
Distinctness of Mongoloids and Mediterraneans, 153.
Distribution of Primates and Carnivores, 358; of palms, 360.
Divergence, extreme in four Black races, 236.
Diversification of African types, 237.
Dodanim, 41.
Dodoneans, 41.
Dokos, 267.
Dolichocephalism, 152, 246; in America, 338; of Eskimo, 344.
Dolichocephalous heads, 68, 165.
Dolmens, skulls from, 167.
Domesticated animals and plants, 355.
Donaldson, cited, 47.
Douglass, Frederick, 252.
Dowaser tribe, 94.
Dravidians, 79, 144, 369, 473; characterized, 54; distinct from Mongoloids, 142, 144; transition from, to Australians, 312, 348, 365; portrait of one of, 34, 349; dispersion of, 407, 430; families of, 53; dialects of, 56, 144.
Dsungarian trough, 375.
Du Bois, cited, 39, 42.
Duck, Labrador, 434.
Dulkhelitæ, 33.
Dunmore-Lang, cited, 370.
Dutch, 80.
Dyaks, 267, 277, 298.
Dynasties, Egyptian, 111; question of parallelism of, 111; views on, 114; events of first

three, 124; in fourth, 125, 200, 216, 443; in fifth, 126; sixth to fourteenth, 126, 198, 207, 208, 256; period of Shepherd Kings, 126; eighteenth, 126, 197, 200, 203; nineteenth, 127, 198, 200; the Ethiopian, 200.
Eadie, on names in Genesis, 15.
Earl, cited, 366.
Easter island, 370, 400.
Eber, 31.
Eden, 348, 360, 361, 408; of Brahmans, 361; of Americans, 384.
Educability of intelligence, 272.
Egypt, antiquity of, 120, 133.
Egyptian chronology. See Chronology.
Egyptian dynasties parallelized, 116; history, 124, 200, 466; language, 145, 467; monuments, 110, 198; knowledge of races, 199; queen from Ethiopia, 127; queen Tii, 127; intermarriages, 200. 466.
Ekog-muts, 323.
Elam, 30, 92, 133.
Elamites, primitively Semitic, 30.
Elassar, 133.
Elephant of Africa, 260, 262.
Elis, 41.
Elishah, 41.
Elliott E. B. cited, 102.
Elymais, 80.
Elymæans, 137.
Embryonic development of brain, 250.
Emim, 448.
Engel, cited, 384.
Engis skull, 152, 414.
Engisheim skull, 152.
Enine, descended from Anamim, 20.
Enoch, son of Cain, 188.
Enosh, 190.
Environment a condition, 185, 187.
Eozoön, 272.
Epoch of first man, 419; of Stone Folk, 420; of Adamites, 445.
Epochs, of history, 123; mythological, 129.
Eponyms, 11–14.
Era of Menes, 117.
Erech, 19, 133, 135, 448.
Erechtheus, 380.
Eriocome races, 299.
Eskimo, 64, 186, 383, 388, 389: dolichocephalic, 167, 320; portrayed, 65; described, 320; cranial capacity of, 320; antiquity of, 325; contrasted with Vagantes, 320, 321, 327; type of, extending southward, 330, 334; type of, in Patagonia, 337; migrations of, 389, 396; in Greenland, 390; origin of, 397, 477.
Ethiopian region, 357.
Ethnography of Bible, see Biblical.
Ethnologists, American, 383.
Ethnology, American, 383.
Etruscans, 45, 49, 128; of Hamitic origin, 25; inscriptions by, 25.
Euplocam races, 300, 369.
Eurasia, 356.
Europeanized Mongoloids, 79.
Europeans, see Noachites and Mediterraneans.
Euscara language, 149, 378.
Eusebius on chronology, 110, 129.
Eusebius de Salles cited, 158.
Euthycome races, 300.
Evolution, doctrine of, 264; implies constant creation, 271.
Extinct animals, contemporary with man, 432; of modern times, 433.
Facial angle, see Prognathism.
Falb R. cited, 385.
"Fallen angels," marriages of, 194.
Fans, 368.
Fantees, 69, 256, 258.
Fauna of Australian region, 307
Faunas mammalian, of the continents, 356.
Fellâhin, modern Hamites, 26.
Fiat theory, 270.
Figuier L. cited, 418.
Fiji islands, 76.
Fijian portrayed, 75.
Fijians, 74, 76, 308, 317; legend of, 309; a connecting link, 314.
Finns, 64, 148, 150, 153, 186, 347, 350, 398, 413, 421; language of, 138, 140; migrations of, 377, 379.
Fisk University, 182.
Fitzgerald O. P. cited, 265.
"Five Nations," 342.

Fligier cited, 410.
Flood, see Deluge.
Floras, dispersion of, 401.
Floris island, 76.
Flower W. H., cranial measurements by, 164; on Negritos, 312.
Fontan, cited, 416.
Formosa, 312.
Forster, cited, 19, 32, 94.
Foster J. W., on mound-builders, 340; on Central American traditions, 380.
Fragments of old races, 298.
Francourt, cited, 393.
Fresnel, cited, 19.
Friendly islands, 370, 400.
Frontal, skulls of, 151, 417.
Fuchow official, portrayed, 61.
Fuegia, 401.
Fuegians, 268, 277, 298.
Fu-hi, 129.
Fulah, see Fulbe.
Fulbe, 69, 78, 79, 258, 310; mixed Berber and Negro, 238, 367; described, 70.
Fundi, 368; described, 70.
Furfooz, see Frontal.
Furuhelm J. on certain Indians, 327.

Gaels, 39.
Gætulian Hamites, 20.
Gatfarel P. on Americans, 386.
Galapagos islands, 400.
Galatia, 46.
Galindo, cited, 384.
Galla, mixed, 27, 54, 77, 238, 239, 310, 367.
Gallicia, 47.
Ganowanian family, 384.
Gauls, 39, 46.
Gazelle, soundings from, 381.
Genealogical lists, Egyptian, 112.
Genealogical tables of Genesis accurate, 10, 99; alleged incomplete, 223; complete, 223.
Genealogical tree of mankind, 351.
Genealogy and classification, 298.
Genealogy of Black races, 297; of Brown races, 311; of White race, 346; of mankind, 351.
Genesiacal dispersion limited, 88; chart of, 88.
"Genesis of the Earth and of Man," cited, 196; examined, 462.
Genesis (tenth chapter), language of, 10; names of, not personal, 11, 12.
Genghis Khan, 374, 375.
Gentoo language, 56.
Geological changes since man's advent, 436.
Georgians, 42.
Germans, 47; in the nomadic state, 122; cerebral substance of, 172.
Geronnière de la, cited, 267.
Gesenius, cited, 16, 19, 134, 450.
Getæ, 48.
Gether, 35.
Gibbs G. cited, 328, 390; on Indian languages, 329.
Gibraltar, 23, 28.
Gihon, 91.
Giliaks, 143.
Gillieron, cited, 441.
Gimiri, 38.
Giraffe, 260.
Girard, on age of Nile delta, 119.
Girgasite, 22.
Gizeh, pyramids, 125.
Glacial Epoch, conditions attending, 429; human movements during, 429, 430; not excessively remote, 437.
Glacial periods, 431.
Glaciers visibly changing, 437.
Gobi, see Tarym-Basin, 372.
Gomer, 38, 88, 132, 142.
Gomerians, 39, 142.
Gomorrah, 134.
Gonds, 56.
Gorilla, portrait of, 253.
Goths, 46, 77.
Gould's measurements, 83.
Grand Pressigny, 416.
Grecian colonizations by Aryans, 45.
Greece, first intercourse of with Egypt, 26.
Greek language, 240.
Grey, George, on Maories, 264.
Grotius, Hugo, cited, 384.
Grimm, cited, 47, 148, 413.
Griquas, 80, 81.
Guanches Hamitic, 27, 28.
Guatemala, 393, 394.
Gypsies, 44.

Hadendoa, 237.
Hadoram, 32.
Hadramaut, 32.
Haeckel E. cited, 421, 423; on classification, 299; on Lemuria, 360.
Haidahs, 326, 330.
Hailtsa, 326.
Hair, 186; as a taxonomic character, 298; of Egyptians, 203, 204, 466.
Hairiness, 63, 73, 324.
Hales, cited, 18; on epoch of creation, 99.
Ham, import of word, 16, 54, 90, 190, 226, 409.
Hamath, 92.
Hamathite, 23.
Hamites, and their dispersion, 16, 447; close kindred of Semites, 36; in south of Europe, 23, 24, 379; as founders of cities, 24; absorbed by later populations, 29.
Hamitic, civilization in Babylonia, 20; mixtures, 78; type persistent in miscigenesis, 27, 71; family, 54; origin of Negroes considered, 222; supposed grounds of this theory, 223.
Harrington M. W., illustration from, 61, 62, 63.
Harte, Bret, cited, 427.
Hausa language, 69, 368.
Haven, Bishop Gilbert, on miscigenesis, 81.
Havilah, the Hamitic, 11, 18; the Semitic, 33.
Hawaiian woman portrayed, 173, 318; man portrayed, 59, 316.
Hawkshaw, Sir John, cited, 121.
Hays I. I. cited, 434.
Hayti, Negro in, 265.
Hazara, 374.
Hazarmaveth, 32.
Heber, 31.
Hebrew chronology, 98; inexact, 99.
Hebrew, documents, antiquity of, 98; ethnology, 98.
Hebrews, 32.
Hendree, Dr. J., testimony of, 177.
Heredity, influence of, 231.
Herodotus, cited, 24, 119; on chronology, 111.
Hesiod, cited, 146.
Heth, 22.
Héva, 361, 407.
Himyaric Arabians, 23, 29, 33, 97.
Himyarites, 78, 97, 187, 239.
Himyaritic portrait, 202.
Hindu Kush, 43, 44.
Hindu language, 44, portrait, 202.
Hindus, 49, 79.
Hiong-Nu, 347.
Historical indications on age of Stone Folk, 442.
History of Egypt, 124.
Hitchcock E. cited, 439.
Hittites, 22.
Hivite, 22.
Hoang-ti, 130.
Holmes W. H., 405.
Hombron, cited, 461.
Homer, cited, 145.
Hooker J. D. on land connections, 360, 401.
Horn G. on Americans, 386.
Horse and race divergence, 216, 217.
Hottentot, families, 53, 71; race, 71.
Hottentots, 80, 86, 185, 320; connection of, with Egyptians, 71; cephalic index of, 167, 168; prognathism of, 171; length of arm of, 172; homogeneity of, 239; language of, 71, 241; brain of, 249; portrait of, 253; physiognomy of, 254; compared with Papuans, 308; legend of, 309; compared with Mongoloids, 313; nasal index of, 320; origin of, 367; in relation to two human origins, 368; claimed derived from negro, 465.
Hovas, 371.
Hrabamus, cited, 360.
Hul, 35.
Humboldt A. cited, 47, 378, 395; on Americans, 338, 386, 387, 391.
Humerus of Bushmen, 171.
Humphreys and Abbot, cited, 440.
Hungarians, 79.
Hungary, occupied by Kelts, 46.
Hunt J., cited, 418.
Hunt S. B. cited, 83.
Hunting Indians, see Vagantes.
Hupa, 329; portrait of, 331.

Huxley T. H., on racial fixity, 135; on classification, 299; on Dravida, 312; on Neanderthal skull, 414; on age of man, 426.
Hwang-ho, 372, 437.
Hwei-hi, 373.
Hyatt A. cited, 275.
Hybridity, see Miscigenesis.
Hybridity among Egyptians, 27, 79.
Hyksos, as ancestors of Americans, 385.
Hyperborean type, 345.

Iapetus, 38.
Iberians, 42, 45, 46, 149, 198; migrations of, 378; epoch of, 443.
Ice-wells, 438, 439.
Iconographs, Egyptian, 199, 200, 211.
Idiocy, 182.
Incas, 394, 395, 405.
Index cranial, 165.
Indo-Chinese, 317, see Malayo-Chinese.
Indo-Europeans, see Aryans.
Inìac radius, 169.
Innuit, see Eskimo.
Insanity, 182.
Inspiration, the guarantee of, 456.
Intermixtures, see Miscigenesis.
Iobaritæ, 33.
Ionian islands, 65.
Ionian Japhetites, 48.
Ionians, primitive Pelasgic, 25; Japhetized, 40; overlying Turanians, 138.
Irad, 188, 193.
Iranians, 140, 430; languages of, 467.
Iranic sub-family, 440.
Irish elk, 436.
Iron age, 167, 442.
Iroquois, 342, 396; strength of back of, 175.
ISh, 160, 190, 196, 294.
Ishmaëlites, 37, 97
Ismi-Dagon, 128.
Israel, lost tribes of, 385.
Issel, cited, 425.
Istrians, 45.
Itelmes, 64, 325.
Ives Lieut., on American languages, 329.

Jabal, 136, 188, 446.
Jackson W. H., illustration from, 66, 332, 334; on cliff-dwellings, 341, 405.
Jacolliot L. cited, 361.
Japanese, 311, 318, 323, 342, 355; one of portrayed, 62, 324; family, 61.
Japheth, the name, 38, 409.
Japhetites, dispersion of, 38, 447; in secular history, 43; languages of, 467.
Jargon, 322.
Javan, 40.
Javanites, 38, 40, 48.
Jebus, 22.
Jebusite, 22.
Jefferson Thomas, on negroes, 251.
Jerah, 32.
Jews, as ancestors of Americans, 385.
Jobab, 33.
Johnson Dr. on color of negro, 223.
Johnson Keith, cited, 314.
Joktan, 32.
Joktanides, 32, 37, 97, 239.
Joloffers, 69.
Jonathan, Targum of, 97.
Joruba dialects, 69.
Josephus, on chronology, 111.
Jubainville, cited, 24, 25, 128, 443.
Jubal, 136, 188, 446.
Judea, primitively Hamitic, 23.
Justin, cited, 141.

Kabyles, 26, 27.
Kaffirs, 69, 185, 258, 310, 367.
Kalmuks, 64, 79, 374, 411.
Kamtchatka, passage from, 399, 400.
Kamtchatkans, 164.
Kanaks, 317, 400.
Kaniag-muts, 323.
Kanoa, 317.
Karnak, tablet of, 113.
Kash, 95.
Kashgar, 44, 295, 372.
Katabania, 33.
Ke islands, 75.
Keltiberians, 49.
Kelts, in northern Italy, 26, 46; in Hungary, 46; in America, 387; in the nomadic state, 122.

Kennicott, cited, 108.
Kenrick J. cited, 18, 108, 112.
Kesh, 95.
Keshite queen, 127.
KhâM, see Ham.
KheM, 16, 90.
Khitan, 374.
Khiva, 44.
Khonds, 56.
Khotanese, 372.
Kidd Prof. cited, 129.
Kiekars, 347.
Kimmerians, 39, 42, 46, 48.
Kirghis, 64, 373.
Kittim, 41.
Klalam, 326.
Klunzinger, cited, 119.
Kneeland S. on Mulattoes, 84, 178; on preadamites, 462.
Knobel, cited, 17, 31, 39.
Knox, on Mulattoes, 85.
Koi-koin, see Hottentots.
Kokand, 44.
Kolushes, or Koloshians, see Tlinkets.
Koraks, or Koriaks, 322, 327.
Koreishites, 238.
Kosmas Indicopleustes cited, 361.
Kowitsin, 326.
Krapf on Dokos, 267.
KSh, 95.
Kurdish portrait, 202.
Kurile islands, 312; passage from, 399.
Kurilians, 143.
Kuro Siwo, 400.
Kurtz, on names in Genesis, 14.
Kush, 95.
Kyahni, 326.
Kymr, or Kymri, 39, 46.

Lactantius, cited, 360.
Lallemand, cited, 268.
Lamarck, cited, 184.
Lamboidal radius, 169.
Lamech, 188, 194; two wives of, 194.
La Naulette, jaw from, 251.
Lanci, cited, 52.
Landa, cited, 386.
Lange, cited, 35, 39.
Language of Bible, see Biblical language.
Language of Genesis, see Genesis.
Languages, variability of, 229, 329, 330; persistence of, 240; in Africa, 241; in America, 320; as ethnic criteria, 325; of Mexico, 333; of Dravida, 365, 409; of Egyptians, 467.
Lapps, 150, 153, 345, 351, 413, 421.
Larat island, 75.
Latham, cited, 312; on Eskimo, 327; on Aryans, 410.
Lawrence, cited, 338.
Layard, cited, 18, 198.
Lebanon Mts., 23.
Leconte Jos. cited, 439.
Lectonia, 440.
Legend of Fijians, 309; of Hottentots, 319.
Legge, cited, 131; on Chinese migrations, 372.
Legs in Negro, 174.
Lehabim, 20.
Le Hir, on biblical chronology, 107.
Le Hon, on Nile delta, 119; on Iberians, 150; on prehistoric skulls, 151, 152.
Leidy J. cited, 382.
Leleioho, portrait of, 59.
Lelewel, cited, 410.
Lemuria, 359, 407, 429, 433, 473.
Lemuroids, 359.
Lengthened chronology needed, 223, 224.
Lenormant C. cited, 108.
Lenormant F. cited, 18, 24, 33, 40, 110, 112, 114, 134, 142, 152; on biblical chronology, 107; on Egyptian chronology, 114; on prehamites, 140; on origin of Turanians, 141; on the curse of Noah, 225; on human antiquity, 431.
Léognan, 422.
Lepcha portrayed, 319.
Lepsius, cited, 18, 71, 108, 112, 113, 114, 198, 207, 218; on Ethiopians, 96; researches of, 118.
Leptorhinian skulls, 320.
Le Puy-en-Velay, 423.
Le Sueur, cited, 108.
Letto-Slavs, 47, 49.
Letts, 47.
Leucomelanous races, 299.
Leucous races, 299.
Lewis, Edmondia, 252.

Liberia, 265.
Libyans, 20; epoch of, 443.
Lichtenstein, on Bushman traits, 254.
Lightfoot, on precise biblical dates, 104.
Ligurians, 25, 45, 49, 151, 198.
Limited scope of biblical ethnography, 88.
Linguistic characters persistent, 240.
Linguistic affiliations in Africa, 241.
Liotrichi, 299.
Lipans, 342.
"Lived," how employed in Hebrew, 451.
Longevity of patriarchs, 5, 231; implies insusceptibility of change, 232; treated by Crawford, 450.
Loo Choo islands, 312, 365.
Lophocome races, 299.
Lot, 133.
Loyalty islands, 76.
Lub, 95.
Lubbock J. cited, 418, 441.
Lubim, 20.
Lucania, 25.
Lud, 34, 41, 95.
Ludim, 20.
Lungs, capacity of, 173.
Lütke, cited, 323, 327.
Lycians, 128.
Lydia, 41.
Lydians of Asia Minor, 20, 34, 128.
Lyell C. cited, 400, 418, 425, 436, 446.

Madagascarese, mixed, 238, 370.
Madai, 40, 132.
Magog, 29, 88, 141.
Magyars, 79.
Mahmoudi canal, 125.
Makah, 328; described, 330.
Makololos, 238.
Makuani, 310.
Malacca, 77, 312.
Malagasy archipelago, 389.
Malai, 33.
Malayalam language, 56.
Malays, 71, 315; described, 57; one of portrayed, 58; dispersion of, 58, 355, 369, 370. See also "Polynesians" and "Hawaiians."
Malayo-Chinese, 60, 317, 345; migrations of, 371, 376.
Mali, 33.
Malichæ, 33.
Mammoth, 377, 398; contemporary with man, 435.
Man a tropical animal, 356; and oriental, 356.
Mandingoes, 65, 256, 257, 368; progress made by, 257.
Manetho on Egyptian chronology, 110, 129.
Mankind, types of, 52.
Mantchus, 63, 404.
Mantua an Etruscan city, 25.
Maories, 317; civilization of, 264.
Marcellus on Atlantis, 381.
Mariette, on Egyptian chronology, 110; on parallelism of dynasties, 112.
Market products of Nyangwe, 261.
Markham C. cited, 389.
Marquesas islands, 370, 400.
Marsh O. C. cited, 382.
Marvin, Bishop, on redemption in other worlds, 289.
Mascarene islands, 359.
Mash, 35.
Masoretic text of Bible, 8, 9.
Maspero, cited, 150.
Massat, 416.
Maurer C. cited, 390.
Maury A. cited, 315, 364.
Maya, 334; civilization of, 262.
M'Causland, cited, 38; on Shepherds of Egypt, 126, 385; on Adam and *ish*, 196; on West Indies, 265; on theological consequences, 288; on origin of Americans, 385; on preadamites, 468.
McClintock and Strong's Cyclopædia, cited, 17, 19, 93, 94, 96, 102, 103, 120, 125, 458, 465.
McCulloch, cited, 384.
Medean Dynasty in Babylonia, 128, 139, 140.
Medes, 40; displaced Turanians, 40, 140, 141.
Medicines, doses of, required, 177
Mediterranean shores occupied by Hamites, 23.

Mediterraneans, 52, 53; anthropological characters of, 162, 164, 166, 167, 168, 169, 172; skeleton of, 248; portrayed in ancient Egypt, 201; genealogy of, 346, 408; three concurrent indications, 346; origin of, 348, 350; dispersion of, 407; various opinions on, 409; primitive condition of, 418; epoch of, 445.
Mehujaël, 188, 193, 194.
Meigs, cited, 338.
Melanesians, 76, 77, 311; dispersion of, 365.
Melanochroi, 135.
Melanous races, 299.
Menes, Era of, 117, 128, 212, 218, 219.
Mentone skull, 152.
Merhet, portrait of, 205.
Meshech, Semitic, 35; Japhetic, 42.
Mesocephalic heads, 165.
Messapians, 25.
Miao-tse, 317, 376.
Micronesians, 59, 76, 77, 292, 370.
Midian, 91.
Migrations, 355; of Polynesians, 354; of Hottentots and Negroes, 367; of Asiatics, 369; of Chinese, 372; of Turks, 373; of Mongols, 374; of Tunguses, 374; routes of, 375; of Ural-Altaics, 377; of Americans, 388, 396, 404; of Mexicans, 390; routes of, 392; of Aztecs, 392; of Central Americans, 394; from Polynesia, 400.
Miller H. on cosmic redemption, 292.
Miller S. cited, 308.
Milne-Edwards, cited, 359.
Mincopies, 76, 77, 311, 314.
Miocene Atlantis, 382.
Mir-ku, 158, 475.
Miscigenesis, 79, 80; not always perfect, 80; a bad case of, 279; in the United States, 81; in Egypt, 127.
Missing links, 234; meaning of, 235.
Mixed races, 237, 238, 279.
Mixtecs, 392.
Moffat, cited, 71.
Molucca islands, 76, 311.
Mongols, 63, 79, 314; invasions of in Europe, 48, 374; origin and migrations of, 374, 377, 404.
Mongoloids, 53, 57; populousness of, 154; cosmopolitan, 154; cranial capacities of, 163, 164, 246; cephalic index of, 166, 167, 246; prognathism of, 170, 171; cold temperament of, 181; portrait of one of, 202; cross-heads among, 246; compared with Hottentots, 213; American, 320; Asiatic, dispersion of, 369; radiant point of, 370; American, dispersion of, 383, 473.
Monogenists, 185.
Monogeny, 184.
Monsoons, 400.
Monteiro, cited, 281.
Montpereux, Dubois de, cited, 18.
Monuments, Chaldæan and Assyrian, 198, 459; Egyptian, on chronology, 110, 112, 459.
Moor, cited, 281
Moqui, 333.
Morgan L. H. cited, 341, 383, 384, 390, 405.
Morlot, cited, 441.
Morrow W., testimony of, 183.
Morse E. S. cited, 143.
Morton Dr. on Americans, 338, 383.
Mound-builders, 339, 340, 474.
Movel, cited, 277.
Mtesa, king of Uganda, 258.
Mulattoes, not perfect mixtures, 80; inferiority of, 83; strength of back of, 175; feebleness of, 178, 190.
Müller F. cited, 64, 70, 86, 238, 242, 370, 446; on Scyths, 48; on population of the world, 76; on Australians, 307.
Müller Max, cited, 43, 71, 467; on Asiatic movements, 376.
Mummies of Patagonia, 337.
Munda tribes, 54, 56.
Murray, cited, 28, 358; on Polynesian connections, 403, 404.
Muscogees, 343.
Musoi, of Hamitic origin, 24.
Mut-sun woman portrayed, 335.
Muttuk man portrayed, 60.

Muysca, 337.
Muzzle of Negro and Hawaiian, 174.
Mysia, 24.
Mysol island, 75.
Mysteries of inspired language, 457.

Nahoas, migrations of, 391, 393, 405.
Nahsu or *Nahsi*, 127, 197, 199, 208, 263.
Nahuatl or Nahuatlac nations, civilization of, 262; languages of, 333, 334; migrations of, 392, 401.
Namahu, 199.
Namaquas, 367.
Names in Genesiacal genealogies, 11.
Namollo, 64, 321, 322, 323, see "Tuski."
Namu, 197.
Nanai-muk, 326.
Naphtuhim, 20.
Nares Dr., on cosmic redemption, 292.
Nasal index, 320.
Nasal radius, 168.
Nassee, 330.
Natchez, 425.
Naulette, 414.
Navahoes, 342.
Neanderthal skull, 152, 414.
Nearctic region, 357.
Negritos, 77, 312.
Negroes, families of, 53; characterized, 68; enslaved in Egypt, 127; cranial capacities of, 163, 164, 246; cephalic index of, 166, 167, 246; auricular radii of, 168, 247; projections of head of, 169; prognathism of, 170, 247; sundry anatomical characters, 171; length of arm of, 172, 247; lungs of, 173; legs of, 174; heel of, 174; hair of, 174; sundry characters of, 174; physiological characters of, 175; sluggishness of, 175, 181, 183; medicine required by, 177; insensibility of, 178; exemption of, from diseases, 180; psychic characteristics of, 181, 251, 256; insanity and idiocy of, 182; admirable qualities among, 182; depicted on Egyptian monuments, 97, 199, 201, 205; existing in Twelfth, Eleventh, and Sixth Dynasties, 208; summary of Egyptian evidence on, 209; chronological position of, 214, 218; not descended from Noah, 215; nor from Adam, 217, 220; claimed as Adamic, 230; homogeneity of, 239; linguistic characters of, 240; inferiority of, 244; cross-heads among, 246; brain of, 249; in literature and art, 252; physiognomy of, 253; in history, 256, 257; opportunities of, for improvement, 259–64; contrasted with Maories, 264; tendency of to barbarism, 265; inferiority of structure of, 275; a subject of salvation, 284; nasal index of, 320; origin and dispersion of, 367.
Nejd, 35.
Neolithic epoch, 167, 414, 415, 416, 442.
Neotropical region, 357.
Nepalee, 44.
Nestorians, 35.
Neumann, on Chinese chronology, 131.
New Caledonians, 74, 76.
New Granada, 394.
New Guinea, 75, 76.
New Hebrides, 76.
New Ireland, 76.
New Zealanders, 264.
Niam-Niam, 368.
Nicobar islands, 310.
Niebuhr, cited, 47; on Kelts and Iberians, 149.
Niger river, 259.
Nigritians, 465.
Nile, 27; delta of, 119; valley of occupied by Hamites, 23.
Nilghiri Hills, 349.
Nimrod, 19, 20, 31, 135, 448.
Nineveh, 19, 448.
Noachites, 408; language of, 138; cranial capacities of, 162, 164, 245; cephalic index of, 166, 246; auricular radii of, 168, 247; projections of head of, 169; prognathism of, 170, 171, 247; length

of arm of, 172; cerebral substance of, 172; "Ariel's" opinion of, 189; nasal index of, 320.
Noah, as ancestor of all men living, 10, 89, 90.
Nod, land of, 190.
Nolan E. cited, 104.
Nomadic state, duration of, 122.
Nordenskjöld, 322.
Norris E., on Mulattoes, 85; on Maories, 264.
Norsemen, 387.
Northeastward stream of Asiatics, 371, 375, 404.
Nott J. C. cited, 87, 184, 207; on Mulattoes, 179, 180.
Nott and Gliddon, cited, 18, 201, 315.
Nuba, 70, 258.
Nubians, 320; partially semitized, 37; warred upon, 263; Hamitic, 27, 237, 239; and Negroes depicted, 97.
Numidians, 20.
Nutka family, 328.
Nyangwé, market of, 261.
Nyanza lake, 259.

Obal, 33.
Oenotrians, Pelasgic, 25.
Ofor, 33.
Ojibways, 342.
Okee-og-mut, 398.
Olmecs, 391.
Olmo skull, 152.
Oman, country of Seba, 17.
Ombro-Latins, 25, 26, 45, 49.
Omnipotence not limited to particular methods, 6.
Ophir, 33.
Opisthiac radius, 169.
Oppert, on Turanian language, 138.
Orange river, 259.
Orarian type, 321, 327, 388. See also Ale-ut, Eskimo, Sedentes.
Oriental, connections of Americans, 387; region, 357; world, faunas of, 356.
Origin of Americans, 384; of American civilization, 386.
Origins, question of two distinct, 368.
Orinoco, 397.
Orozco y Berra, cited, 392.
Osburn, cited, 113.
Osmanlis, 64, 79, 374, 408.
Ostiaks of the Yenesei, 144.
Otomies, 391.
Outlying tribes, 144.
Ovambos, 69.
Owen, Richard, on Egyptian antiquity, 120; on Fourth Dynasty, 125; on Shepherds of Egypt, 126; on Lemuria, 360.
Owillapsh, 328.
Ozbeg, 44.

Pachacamac, 395.
Paharia, 56.
Pah-Utahs, 355.
Palæarctic region, 355.
Palæolithic, epoch, 167, 442; men, 413, 414.
Palæontological breaks, 234.
Palæontology and race divergence, 216, 232, 234.
Palencan civilization, 394.
Palgrave, cited, 28, 91.
Palms, of Africa, 260; of Lemuria, 360; of South America, 402.
Pamir, 295.
Pamphylia, 41.
Panama, 394.
Paphlagonia, 39, 41.
Papuans, 74, 77, 311; families of, 53; cranial capacities of, 164; compared with Hottentots, 308; with Australians, 308; home of, 310; dispersion of, 365; relation of, to Hottentots, 366.
Papyri, 112.
Papyrus, Turin, 113, 126; Prisse, 126.
Paradise. See "Eden."
Parallelisms in Egyptian dynasties, 111, 114.
Parian chronicle, 380.
Parker T. on Caucasian race, 157.
Parsees, 134.
Parton J., on race repugnance, 85; on negro intellect, 252.
Patagonians, 337, 395.
Pathros, 92.
Pathrusim, 21.
Patrial names in Hebrew, 11, 227; in other languages, 13.
Patriarchal periods, 445.

Patriarchs, ages of, 4, 5, 102.
Pausanias, on Pelasgians, 24; on Cyclopes, 147.
Payne B. H. on the Negro, 189.
Payot, cited, 438.
Peguans, 371.
Pehlevi language, 44.
Pelasgians, of Hamitic origin, 24; events of, 442; in Asia Minor, 24; in Italy, 25, 79; absorbed by Aryans, 79.
Peleg, 33, 135, 447, 448; genealogy ending with, 34.
Pelew islands, 76.
Pelvis, of Negro, 172, 249; of Chimpanzee, 249.
Pentateuch, allows prenoachitism, 132; restricted to Adamic history, 132.
Perigord, 415.
Permians, 64.
Peruvians, 336; type of, in Patagonia, 337; in North America, 341; pottery of, 387.
Peschel O. cited, 57, 68, 74, 238, 267, 311, 326, 357, 360, 370, 415; on Basques, 149; on African languages, 241; on certain legends, 309; on Polynesian migrations, 354.
Peucetians, Pelasgic, 24.
Peyrerius, 287; on preadamites, 454; denounced for heresy, 457.
Pfaff F. cited, 441.
Phaëthon, fable of, 223.
Pharusii, 21.
Philippine islands, 77, 311.
Philistim, 21.
Phillips W. on miscigenesis, 81.
Phœnicia, primitively Hamitic, 23.
Phœnicians, 21, 36, 448; chronology of, 130; and America, 386.
Phœnix, reappearance of, 124.
Phrygia, 49.
Phrygians, 39, 45, 128.
Phul, 41.
Phut, 21, 95.
Physiological comparisons of races, 175.
Pickering, on races, 52, 476.
Pile-habitations, 421.
Pitcairn islanders, 134, 370, 400.
Plan of salvation, 284.
Plants, domesticated, 355.
Plasticity, of Africans assumed, 229, 236; of early races, 230; denial of, 231; opposed by old conception of species, 233; and by populousness of inferior races, 236.
Plato, cited, 147; on Atlantis, 379.
Pliocene man, 426.
Plurality of origins denied, 284, 287.
Plutarch, on the name Ham, 17.
Poesche T. cited, 87, 350, 410.
Poisson, cited, 384.
Polished Stone Epoch, 152, 167, 441, 442.
Polygenists, 185, 384.
Polygeny, 184.
Polynesia as origin of Americans, 385.
Polynesian land connection, 401.
Polynesians, 59, 74, 76, 77, 264, 310, 317, 320; in America, 343, 400; dispersion of, 370; voyages of, 400.
Poole R. S., on Egyptian monuments, 110; on parallelism of dynasties, 111, 114; on prehamitic populations, 134; on Epoch of Flood, 213; on preadamites, 468.
Population by races, 76.
Porteus, Bishop, on cosmic redemption, 293.
Portrait of, Tamulian, 55; Malay, 58; Hawaiian 59, 173, 316, 318; Malayo-Chinese, 60; Chinese, 61; Japanese, 62, 324; Aïno, 63; Eskimo, 65; American Hunting Indian, 66, 332; Aleut, 67; Bushman Venus, 72; Australian, 73; Papuan, 75; Aëta, 78; Nubians, 97; Negroes, 97, 205, 206; Aryan, 201; Himyarite, 202; Kurd, 202; Hindu, 202; Mongoloid, 202; Egyptian, 203, 204, 205; Hottentot and Gorilla, 253; Polynesian, 316, 318; Lepcha, 319; Hupa, 331; Spotted Tail, 332; Moqui maiden, 334; Mut-sun woman, 335; Quichua, 336; Dravidian, 34, 349; Egyptians, 97, 199 seq.

Portuguese, degraded, 277.
Pottery, in America, 387.
Powell J. W., on American dialects, 320; in charge of American ethnology, 383.
Powers S. cited, 325, 328, 329; illustration from, 331; on American ethnology, 383.
Pozzy B. cited, 434.
Prairies, 436, 439.
Preadamitism, implications of, 283; not plurality of origins, 285; doctrine of disentangled, 412; in literature, 454; Peyrerius on, 458.
Preadamites, 211, 449; resemblance of to Adam, 191, 197; portrait of, 192; proved by antiquity of races, 211; the question of strictly biblical, 242, 454; Peyrerius on, 454; Van Amringe and others on, 461; anonymous author on, 462; M'Causland and others on, 468; Whedon on, 470; J. P. Thompson on, 471.
Preglacial man, 430, 473.
Preglacial remains mistaken for human, 421.
Prehamitic people in Asia, 134, 135, see "Prenoachite."
Prehistoric crania, 151, 167, 168; prognathism of, 171; people, 398, 413, 418.
Prehistoric time-divisions, 167.
Prenoachite races, 132; Scripture on, 132; non-biblical evidences on, 137; existed in Nile-valley, 145; in Europe, 145, 151, 152; general, 153.
Prescott, cited, 281, 395, 477.
Pribiloff islands, 399.
Prichard, cited, 19, 348; on biblical chronology, 130; on prehamites, 137; on cause of race distinctions, 184; works of, 184.
Priest J. cited, 384.
Primates, distribution of, 358.
Primitive man, 273; not represented by Adam, 294, 412; condition of, 412; not assumed the product of evolution, 412; advent of, in tropical region, 356, 429.
Primitive population of Asia, 134.
Primitive stock of humanity, 297.
Prisse papyrus, 126.
Prognathism, 170.
Progress the law of life, 269; exemplified in palæontology, 270, 273; implied by the fiat theory, 271; and in educability of intelligence, 272; revealed in human history, 273.
Projections of the head, 169.
Proyart, cited, 281.
Pruner Bey, cited, 71, 151, 425.
Prussians, 47.
Psychic comparisons, 181.
Puancé, 423.
Pueblos of Colorado valley, 329, 340, 387, 405.
Pumpelly R. cited, 437.
Punjab, 43, 44, 407.
Pyramids, 118.

Quadrumana and Negroes, 247, 248, 250.
Quadrumana of Africa, 260.
Quagga, 260.
Quatrefages and Hamy, cited, 152.
Quatrefages, cited, 74, 77, 370; on races, 52, 298.
Quichés, 334; civilization of, 262.
Quichuas, 186, 262; portrait of one of, 336; language of, 385.
Quitu, 394, 405.

Raamah, 18.
Race, distinctions, 156; antiquity 97, 188, 198; tables, 211, 299, 300, 302.
Race divergence, not fitful, 216, 217; illustrated by palæontology, 216, 217; of Negro, continuous, 216, 217; supposed primitively rapid, 227.
Races, not sharply circumscribed, 77; disappearing, 86; newly appearing, 86; value of distinctions of, 86; characterized, 52; classification of, 299; primitive African, 239; in early Egypt, 97, 198; depicted, 199; sometimes blended, 200, 464.
Racial, divergences in identifying Adam, 8, 464; interfusion, 80; changes primitively rapid, 227; degeneracy denied, 269.

Radiant point of Mongoloids, 370, 372; of Altaians, 374.
Radii, in anthropometry, 168.
Radius of Negro, 171.
Rameses III, 23.
Ramss, in Arabia, 18.
Raoul-Raquette, cited, 19.
Rau C. cited, 418.
Rawlinson G. cited, 21, 24, 25, 34, 35, 37, 38, 40, 42, 43, 47, 112, 114, 137, 140, 440; work of, 18; on names in Genesis, 15; on Pelasgians, 24; on miscigenesis, 82; inaptness of argument, 82; on Noachic origin of all men, 90; on prehamites, 137; on distinction of Hamites and Turanians, 138; on ethnography of Scyths, 138; on European Tatars, 148.
Rawlinson H. cited, 121, 350.
Readings of Hebrew Bible, 8, 9.
Red Cloud portrayed, 66.
Redemption in other worlds, 289; Whedon on, 289; Marvin on, 289; Chalmers, H. Miller, D. Brewster and E. Nares on, 292; Bp. Porteus and Dr. Bentley on, 293.
Red Sea, connects Arabia and Africa, 28.
Reëxaminations often a duty, 133.
Rehoboth, 20, 448.
Reindeer Epoch, 167, 414, 416, 442.
Religion of prehistoric people, 417; of early Adamites, 418.
Remusat, cited, 131
Rephaim, 448.
Repugnance of race, 80, 85.
Research, allowable methods of, 3.
Resen, 20, 448.
Retu, 27.
Retzius, on Americans, 338, 383.
Rhamenitidæ, 18.
Rhodes, 41.
Ricarees, 342.
Ried Aq. on Patagonians, 337.
Rink, cited, 388, 389.
Riphaces, 39.
Riphath, 39.
River Drifts, 424, 441.
Robertson, cited, 28.
Rocha A. cited, 384.
Rodanim, 41.
Romans, in early times, 45.
Rome, under Etruscan influence, 25.
Rosellini, cited, 93, 112, 198, 206.
Rosetta stone, 40.
Rot, 197, 199.
Routes of Asiatic migration, 375.
Roweyda, 23.
Rude Stone Epoch, 167.
Russians, 47.

Sabatica regio, 19.
Sabeism of Turanians, 141.
Sabtah, 18.
Sabtecha, 19.
Sacy, on biblical chronology, 107.
Sagas, 389.
Saghaliens, 143.
Sahaptin family, 328.
Sahara, 367.
Saint Prest, 422.
Sakkarah, tablet of, 113.
Salachians, 31.
Salah, 31.
Salapeni, 32.
Samnites, 26.
Sanaa, in Arabia, 32.
Sandwich islands, 265, 400.
Sanscrit, 44, 240.
Santa Barbara Indians, 387.
Saporta G. de, cited, 382.
Sarmatians, 46, 48.
Scandinavians, 47.
Schaffarik, cited, 350.
Schleicher A. cited, 241.
Schliemann, cited, 38, 433.
Schouw, cited, 403.
Schulz H. cited, 410.
Science, modern origin of, 4; available in interpretation, 456.
Scientific, mode of research, 3; questions in theology, 2, 89.
Scythians, 39, 46, 49; invade Europe, 47; ethnic position of, 47, 138.
Sears on the Bible, 8.
SeBA, 17, 132.
Secular inferences from Bible, 2.
Sedentes, 326, 327, 328; defined, 344; origin and migrations of, 404; portrait of, 321, 334; partially designated, 333; extended to Patagonia, 337, 388, 405; represented by "mound builders," 339.

Seeman B. on Mulattoes, 178.
Selish family, 328, 390.
Semangs, 77, 312, 314.
Seminoles, 343.
Semites and their dispersion, 30, 448.
Semites, in modern times, 36; always within narrow limits, 37.
Semitic family, 54; languages, 385; intermixtures in Africa, 78, 367.
Semitized nations, 36.
Semper, Carl, cited, 77.
Sennacherib, 93.
Septuagint and English translation, 8; preferred for chronology, 465.
Sequel to doctrine of preadamitism, 282.
Sequoia, 435.
Serbes, of Third Dynasty, 124.
Serres, 250.
Seth, as a name, 450; descendants of, 162, 347.
Sethite Dynasty, 451.
Sewell D., illustration from, 192, 335.
Sèyda, 22.
Seyffarth, cited, 113.
Sharpe S. cited, 112, 121, 123; on Egyptian queens, 123.
Shawnees, 342.
Sheba, Hamitic, 18; Semitic, 33.
Sheleph, 32.
Shell-heaps of Aleutians, 325.
Shem, the word, 30, 409.
Shepherds in Egypt, 26; as ancestors of Americans, 385.
Shillouhs, 21, 26, 70.
Shinar, 19, 92, 133, 135, 295.
Shoals in oceans, 362.
Shoshoni, 330, 390.
Shufu, 204.
Shumir, 140.
Siamese, 317, 371.
Sicanes, 25, 146, 198.
Siculi, 25.
Sidon, 22.
Sifan, 371.
Sikkim, 319.
Sinaitic peninsula, 118; mines in, 125.
Sinite, 22.
Sioux, 342.
Sitka-kwan, 326.
Skeletons compared, 248.
Skrælings, 389.
Skulls prehistoric, mongoloid, 151; some dolichocephalic, 152; index of, 167.
Slavs, 47, 410.
Sluggishness of Negro, 175, 181; reacts on Whites, 182.
Smith C. H. on Mulattoes, 85.
Smith, George, 158, 475.
Smith's Dictionary, cited, 19, 103, 111, 124, 134, 226.
Society islands, 370, 400.
Sodom, 134.
Solomon islands, 76.
Solomon's Song, quoted, 94.
Solymi, 36.
Somali, 78, 238, 239.
Somme, 424.
Sonoran languages, 333.
"Sons of God," 189, 194, 295, 463; in Job, 195, 464.
Sons of Noah as nations, 409.
Sothic periods, 115; defined, 123.
Soudan, Negroes, 310, 367; boundary of Hamites, 26.
Southall J. C. cited, 421.
Spalding, cited, 440.
Species, defined by Dr. Whedon, 228; by Dr. Morton, 228; modern conception of, 232.
Sphinx, Egyptian, 127.
Spinoza, cited, 195.
Square-letter Hebrew, 9.
Squier, cited, 338, 385, 393.
St. Acheul, 416.
Stakhin-kwan, 326.
Stanley, Dean, cited, 19.
Stanley H. M. cited, 258, 261, 434.
St. Augustine on chronology, 101.
Steatopygy, 72, 254, 308, 310.
Steenstrup, 441.
Steere J. B., illustration from, 58, 78, 336; Peruvian skulls collected by, 339.
Steinthal, cited, 241.
Stelæ, Egyptian, 112, 113.
Stephens, cited, 338, 393.
St. Hilaire, cited, 184.
Stone Age, 167, 379, 421.
Stone Folk, Epoch of, 420; high antiquity of, fanciful, 420.
Strabo, cited, 147, 175.

Streams of Asiatic population, 369.
Strength of back, 175.
Strong, James, on chronology, 103; on Epoch of Deluge, 108; motives of, for short chronology, 109; on Egyptian chronology, 111, 112; on Turin Papyrus, 113; on parallel dynasties, 114; table of parallelisms of, 116; on astronomical chronology, 124; his Epoch of Flood examined, 213, 219.
Structural degradation, 275.
St. Thomas, 265.
Stuart, Moses, on various readings, 9.
St. Vincent, Bory de, cited, 184.
Sudan, family, 69. See "Soudan."
Sumeric language, 36.
Summary of this work, 472.
Sumpitan, 343.
Sunburnt family, 52, 162.
Supernatural origins admissible, 3.
Supraorbital radius, 163.
Surovietski L. cited, 410.
Susiana, 30; primitively Hamitic, 23.
Susianians, 48, 137.
Syene, 92.
Symplegades, 440.
Syncellus, on chronology, 111, 129.
Syria, primitively Hamitic, 23.
Syrians, 35, 36.

Table mountain, 428.
Table of first-known advents, 211; of chronological intervals, 212, 218; discussed, 213, 219.
Tablet of Abydos, 113; New, of Abydos, 113; of Sakkarah, 113; of Karnak, 113.
Tablets, Egyptian, 112.
Tacitus, cited, 124.
Tadshik, 44.
Tahkali family, 390.
Tamahu, 197, 199.
Tamulian Dravidian portrayed, 55.
Tamuls or Tamils, 56, 348, 377.
Tarascs, 392.
Tarshish, 41.
Tarsus, 41.
Tarym-Basin, 372, 373, 376, 391.
Tasmanians, 186, 365.
Tatar element of speech, 48.
Tatars older than Hamites, 137.
Tcherkesses, 40.
Tchung-kang, 130.
Téda, 310.
Telegu language, 56.
Temahu, 27.
Tennant E. cited, 267.
Terah, 133.
Tertiary land and water, 362.
Teucroï of Hamitic origin, 24.
Teutons, 46, 47
Thai, 371.
Thenay, 423.
Theological consequences, 283, 472.
Theopompos, on Atlantis, 380.
Thessaly, 45.
Thibetans, 376, 377.
Thièle, bridge of, 441.
Thompson J. P. on preadamites, 471.
Thomson A. S. cited, 265.
Thomson, Wyville, cited, 381.
Thorgon, 39.
Thorowgood T. cited, 383.
Thracians, 24, 42, 45, 48, 122.
Thucydides, cited, 146.
Tiahuanuco, 395.
Tibia, flattening of, 248.
Tidal, 134.
Tigris, 123.
Tii, Egyptian queen, 127.
Timagenes on Atlantis, 380, 381.
Time; a factor in determining Adam, 8, 446, 464; genesiacal, insufficient, 446; examination of, 446.
Timor-Laut island, 76.
Timur, 374, 375.
Ting Ling, 347.
Tinière, cone of, 441.
Tinneh family, 328, 330, 342, 396.
Tiras, 42, 45.
Tirhakah, 94.
Titicaca, 395, 405.
Tlinkets, 65, 330; described, 326.
Toda tribe, 348; one of portrayed, 349.
Togarmah, 39.
Toltecatl or Toltecatlac, civilization and migrations, 391.

Toltecs, 334, 393, 394, 395, 340; migrations of, 392, 405.
Topinard P. cited, 83, 170, 172, 182, 312, 313, 423; on primitive populations, 197; on their plasticity, 230; on human antiquity, 230; on Hottentot physiognomy, 254; on Australians, 307; on Patagonians, 337.
Torfæus, cited, 389.
Totonacs, 392.
Traditional beliefs, 1, 4, 6; found erroneous, 4, 5.
Traffic about Behring's Strait, 398.
Transition from Mongoloids to Papuans, 312; from Australians to Dravida, 312.
Translations of Bible, 4, 8.
Troglodytes, 145, 428; linguistic affinities of, 148; crania of, 167; older than Adam, 412. See "Prehistoric."
Tsaroff, George, portrait of, 67.
Tsinuks, 327, 328, 390.
Tuareg, 186.
Tubal, 41, 42.
Tubal-Cain, 136, 188, 446.
Tufted hair, 71, 74.
Tukin, 373.
Tungus, 63, 318, 319, 325, 374, 377, 391.
Turanian, affinities of Dravida, 56, 315, 348, 409; words, 134; languages, 467; dialects underlying all, 137, 141, 409.
Turcomans, 64, 79, 408.
Turin Papyrus, 113, 126.
Turkestan, 43.
Turkish migrations, 373.
Turks, 64, 79, 345, 348, 350, 377, 391, 404.
Turner Prof. cited, 433.
Tursanes, 24.
Tuscaroras, 387.
Tuski, 320, 321, 344.
Tylor, cited, 281.
Tyndall J. cited, 438.
Types of mankind, 52
Tyrrhenians, 24, 25.

Ubic family, 150.
Ugaluk-mut, 327.
Ugrians, 64.
Uïghurs, 64, 373.
Ulotrichi, 299.
Unger, cited, 112.
Unity of mankind, 297, 473.
Ur, 31, 133.
Ural-Altaics, 64; origin and migrations of, 377. See "Finns."
Urdu language, 44.
Usher on Epoch of Deluge, 108.
Usherian chronology examined, 211, 449.
Usün, 347.
Uz, 35.
Uzal, 32.
Uzbeks, 408.

Vaal river, 259.
Vagantes, defined, 342, 344; compared with Eskimo, 321, 327; portrait of one of, 66, 332; encroaching on Sedentes, 340, 396; contrasted with Sedentes, 342, 388; in South America, 343; affinities of with Polynesians, 343; migrations of, 405.
Vambery, cited, 347.
Van Amringe on preadamites, 461.
Variability of species at different epochs, 235.
Various readings of Bible, 8
Vasco da Gama, 280.
Vater, cited, 384.
Vedas, 43.
Veddahs, 267.
Venetes, 45.
Venice, 45.
Veys, 256.
Virchow, cited, 77.
Virey, cited, 184.
Virgil, cited, 147; description of Negress, 207.
Vogt, Carl, cited, 251, 418.
Volney, cited, 18.
Von Hellwald D. F. cited, 384, 391, 394, 395.
Von Richthofen F. cited, 130, 131, 318, 437; on Chinese migrations, 372, 373.
Von Tschudi on mixed races, 83.
Voudouism, 265.
Vrolik, cited, 249.

Wagner G. cited, 384.
Waigiou island, 75.
Wallace A. cited, 76, 360, 363; on faunal regions, 357.

Wallachia, 47.
Warren G. K. cited, 441.
Watson and Kaye, cited, 319.
Webb, on Dravidian languages, 315.
Weber, cited, 249.
Welsh in America, 387.
Westergaard, cited, 141.
Western stream of Asiatics, 378.
Whales becoming extinct, 433.
Wheatley, Phillis, 252.
Whedon D. D. cited, 17; on Hamitic origin of Negroes, 90; on early racial changes, 227; on nature of species, 228; on Bible and science, 228; on plasticity of Africans, 229; on variability of languages, 229; a short chronologer, 231; arguments of examined, 231; on race degradation, 277; on theological consequences, 286, 287; candor of, 288; on preadamites, 470.
White Nile, 27.
White race, see "Mediterraneans."
Whitney J. D. cited, 426.
Whitney W. D. cited, 56, 71, 145, 241, 315.
Wife of Cain, 188, 190, 193; of Seth, 191; of Cainites, 193.
Wild J. J. cited, 381.
Wilkinson J. G. cited, 113, 114; motives of, for short chronology, 109; table of dynasties of, 116.
Williams Prof. cited, 129.
Wilson, cited, 281, 339; on origin of Americans, 385, 386, 404.
Winchell A. cited, 271, 357, 421, 435, 471.
Woman, formed from a rib, 3; meaning of this, 294.
Women, Egyptian as rulers, 123.
Woolly hair, 186.
World, age of, 4.
Worlds, other, reached by redemption, 289.
Wyman Dr. J. on Negro physiognomy, 253; on Tuski skulls, 320; on Californian skull, 427.

Xanthochroi, 135.
Xanthomelanous races, 299.

Yakutats, 326.
Yakuts, 64, 373.
Yao, 130.
Yareb in Arabia, 32.
Yemen, 32, 33.
YOLaD, 450.
Yoloffs, 186.
Yu, 130.
Yucatan, 393, 394, 405.
Yukagiri, 144.
Yunan, 40.
Yuncas, 337.
Yvan, on race degradation, 277.

Zapotecs, 392.
Zeboim, 134.
Zebra, 260.
Zebu, 371.
Zemarite, 23.
Zend-Avesta, 295, 430.
Zend language, 44.
Zerah, 94.
Zipporah, 91.
Zoroastrianism, 43.
Zuzim, 448.
Zygomatic arch, 348.

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Preadamites; or, A demonstration of the
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